ROCK ART
in SOUTHERN SASKATCHEWAN

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By

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Abstract

Prior to the completion of this thesis entitled *Rock Art in Southern Saskatchewan* very little information regarding rock art in the southern region of the province had been compiled in one place. The purpose of this thesis is to collect information about important rock art sites in southern Saskatchewan and to record the rock art and its current condition. In addition, the rock art of the area is placed in the broader context of Northwestern Plains rock art and interpretations for the rock art found in Saskatchewan are made. Also included is a review of rock art styles found across the Northwestern Plains as defined by Keyser and Klassen (2001), including illustrative examples as well as extensive photographic material and drawings of the sites in southern Saskatchewan. Sites include Crowstand Effigy, St. Victor Petroglyphs, Cabri Lake Petroglyph, Leader Petroglyph, Hazlet Pictographs, Herschel Petroglyphs, Swift Current Petroglyph, Gouldtown and Wood River Petroglyphs, two Last Mountain Lake boulders, Riverhurst Petroglyph, Roche Percee Petroglyphs and Weyburn Petroglyph.

Rock Art in Southern Saskatchewan provides a comprehensive volume on rock art in the region allowing other researchers access to the depth of rock art in the province. It also refines the current knowledge of how and where Saskatchewan rock art fits into the larger picture of artistic activity on the Northwestern Plains.

Acknowledgements

In completing this thesis there were many people that supported me along the way. I would like to thank the Department of Archaeology, including my fellow graduate students, my Thesis Committee members and in particular, my advisor, Dr E.G. Walker. I would also like to thank David and Dixie Green of Swift Current, John Wright of Swift Current, George Chopping of Whitewood, Steve Wilson of Coderre, Dave Neufeld of Hershel, and Dr Robert Laing of Leader. I would like to acknowledge the Heritage Foundation for awarding me with a research grant for this project. I would also like to acknowledge the support of my family; my parents Dale and Gloria Schneider, especially my mom for being such a fun and tireless research assistant. I am also extremely grateful for the technical expertise and support of my boyfriend, Michael Bartsch.

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CHAPTER ONE: INTRODUCTION

1.1 Introduction

Rock art is an ancient art form that can be found throughout the world. Images found on rock surfaces are unique in that they are difficult to study through conventional archaeological means, such as the use of stratigraphy or radiocarbon dating. They are also unique for the qualities we believe they possess, particularly as a key to the ideological concepts of the people who lived in the past. Some examples of rock art are also admired for their simplicity and beauty. This combination of difficulty and desire makes rock art an intriguing subject in the realm of archaeology.

There are many rock art sites found in North America especially in the western regions. The diversity in rock art imagery reflects the full range of economic, sociopolitical, and ideological development. Rock art sites in North America also reflect the great time span of occupation from the beginning of settlement to the 1900s (Keyser and Klassen 2001). It is worth mentioning that the places where rock art is found are significant and in many cases spectacular in their own right. The connection between the landscape and the people is clearly evident.

While there are not a large number of rock art sites in Saskatchewan, there have been a number of studies conducted by a variety of researchers. T.E.H. Jones completed a thesis at the University of Saskatchewan concerning rock art of the Churchhill River in 1981. He has also been involved with a number of studies of rock art throughout the province. In 1992, Buchner and Steinbring began a somewhat more comprehensive study involving some of the rock art sites in the Southern Saskatchewan region. Their report was submitted in 1998 and included analyses of the rock art at Herschel, Swift Current, the Gouldtown Petroglyph, the Cabri Lake

Petroglyph, and the Hazlet site, all of which are included in this thesis. A number of rock art boulders have been described individually in a variety of sources, however, no comprehensive report or analysis has been completed thus far.

1.2 Objectives

Prior to the onset of this research, it was recognized that few or no publications, particularly recent publications, have been set forth regarding the rock art found in southern Saskatchewan. For the purposes of this research, southern Saskatchewan has been described as an area south of the boreal forest and the city of Prince Albert. The region of focus for this project includes a variety of physiographic zones including grasslands and more irregular topography to the southern extreme. To the north of this zone is the Aspen Parkland belt which includes elements of both grassland and deciduous forest (Walker 1999). For a map of the sites included in this research, see Figure 1.

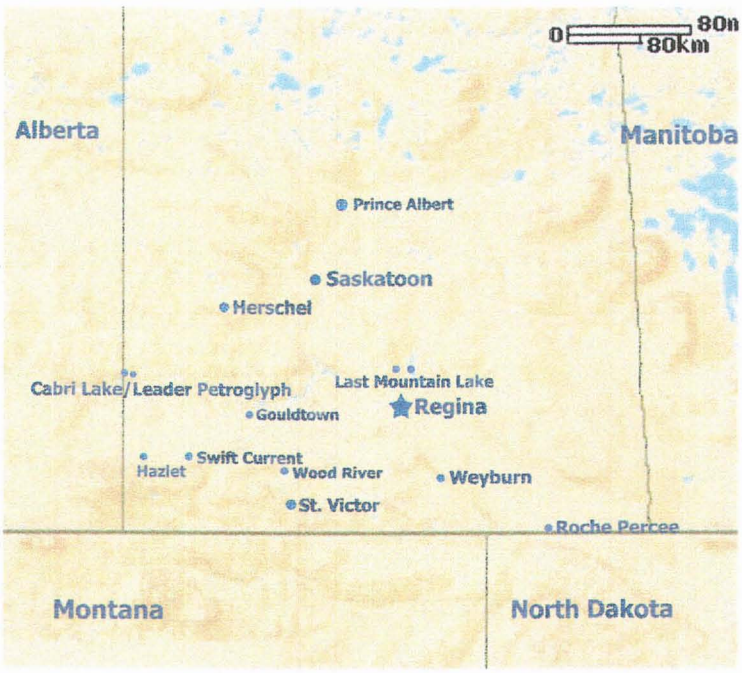


Figure 1 Map of rock art sites in Southern Saskatchewan

This lack of information has led to a deficit in understanding a recognized source for the ideological perspective of prehistoric inhabitants of Saskatchewan. In an attempt to reconcile this lack of published information, the following thesis has been undertaken. The objectives for this project are as follows:

1. To compile as much information as possible about rock art sites in southern Saskatchewan.
2. To record the rock art sites in order to preserve the information as well as to update prior records.
3. To place the rock art sites of this region within the greater scope and context of rock art on the Plains in North America.
4. To provide interpretations for the sites in southern Saskatchewan.
5. To make available information regarding Saskatchewan's rock art sites for researchers conducting studies elsewhere.

1.3 Terminology

A description of some of the specific rock art terminology used in this thesis will be provided in order that discussions are clear. **Pictograph** refers to rock art that is painted with pigment onto the rock surface. **Petroglyph** refers to an image that has been abraded, incised or pecked into the rock face. **Anthropomorph** refers to images with human form, while **zoomorphs** have animal form. The use of these terms is explained by Keyser and Klassen (2001:8): "Many researchers use these terms, as we do, when they are unsure if the original artist intended a specific figure to represent an actual human (or animal) or merely the concept of humanness or even the personification of a spirit of other non-living thing". **Pictogram** refers to a depiction of something that is recognizable in the world, such as a drawing of a tree. An **Ideogram** is a symbol with an abstract relationship to something in the world, such as a letter representing a spoken sound (Keyser and Klassen 2001).

1.4 Overview of Southern Saskatchewan Prehistory

The following is a brief overview of prehistory of southern Saskatchewan in order to place the current rock art research within an archaeological context. The description is based on Dr E.G. Walker's (1999) contribution to the *Atlas of Saskatchewan* and is intended to introduce or remind the reader of the considerable evidence for the way of life in southern Saskatchewan in the period prior to the arrival of Europeans.

In precontact times, bison hunting was the primary mode of subsistence although other animals were utilized to a lesser degree. The categorization of the archaeological record is based primarily on projectile point morphology and is divided into a number of time periods including the Early Precontact period (PaleoIndian), the Middle Precontact period (Archaic), and the Late Precontact period.

1.4.1 Early Precontact Period

Evidence of the earliest inhabitants of southern Saskatchewan indicates that hunting megafauna was the primary mode of subsistence. Distinctive fluted projectile points and carved bone and ivory shafts are typical of the Clovis archaeological culture which dates to 11,200 to 10,900 years ago (Walker 1999). Unfluted Goshen-Plainview projectile points are contemporaneous and date to 11,300 to 11,00 years ago (Walker 1999). The subsequent archaeological cultures, Agate Basin and Hell Gap, show basal constriction in the projectile points. Agate Basin dates slightly earlier at 10,500 to 9,500 years ago while Hell Gap dates to 10,000 to 9,500 years ago (Walker 1999).

The constriction of projectile point bases continued as archaeological cultures shifted to the Alberta, Alberta-Cody, and Cody groups, with the Alberta archaeological culture dating to 9,500 to 9,000 years ago (Walker 1999). Cody complex projectile points include Scottsbluff and Eden types and radiocarbon dates range from 8,800 to 8,400 years ago (Walker 1999). The final part of the Early Precontact period is also known as the Terminal or late PaleoIndian Lanceolate complex which is not well understood, but includes a number of projectile point styles including Angostura, Lusk, James Allen, Frederick, Lovell Constricted, and Pryor

Stemmed. Radiocarbon dates for this period range from 8,800 to 7,500 years ago (Walker 1999).

1.4.2 Middle Precontact Period

During the Middle Precontact period, southern Saskatchewan experienced a wide range of temperature shifts including a period known as the Altithermal in which conditions became warmer and drier. As well, this is the period in which there was a trend towards bison hunting and away from hunting megafauna. At this time, subsistence strategies broadened and population may have decreased. There is a shift in weaponry at this time to side-notched projectile points and atlatl darts (Walker 1999). The Middle Precontact period is divided into three subdivisions.

The early Middle Precontact period is not well understood because of the depth of the sites and the difficulty in locating them. The Mummy Cave complex dates to 7,500 to 5,000 years ago and includes all the archaeological material from this period (Walker 1999). Side notched dart tips are typical and include Bitterroot and Gowen styles among others. Towards the end of this time period archaeological deposits appear to increase in number, possibly indicating population increase as climate conditions changed (Walker 1999).

The middle part of the Middle Precontact period includes two archaeological cultural complexes: referred to as Oxbow and McKean. The Oxbow complex includes distinctive projectile points with a concave base and side notches. This complex dates between 4,700 and 3,800 years BP and is known from sites such as Harder, Moon Lake, and Amisk (Walker 1999). The Gray site located near Swift Current is a large mass interment, which provides a greater knowledge of human burials of the period. The McKean complex is thought to be an "intrusive cultural entity" (Walker 1999:26) and dates to 4,100 to 3,100 years ago (Walker 1999). Projectile points include McKean, a basally concave point, Duncan, a broad-notched basally concave point, and Hanna, a side-notched dart tip. Migration of this complex appears to be from the southwest and outside of Saskatchewan. McKean materials have been found in association with pit houses and grinding implements (Walker 1999).

The Pelican Lake archaeological complex represents the latter part of the Middle Precontact period. Corner-notched projectile points are small and may indicate the initiation of bow and arrow technology (Walker 1999). The origin is not known but the complex dates form 3,300 to 1,850 years ago (Walker 1999).

1.4.3 Late Precontact Period

Technological innovation such as pottery and the bow and arrow are the hallmarks of the Late Precontact period. The Besant complex is a major archaeological culture dating from 2,000 to 1,150 years ago (Walker 1999). Projectile points were larger side-notched points and smaller possible arrow points known as Samantha points (Walker 1999). The extensive use of Knife River Flint indicates trade systems were most likely in evidence. Pottery was used first by Besant peoples and was conoidal in shape. The people lived in pole frame structures, possibly covered in bark, and also lived in tipis (Walker 1999). People of the Besant culture were accomplished bison hunters and several sites including the Fitzgerald site are large kill sites (Walker 1999). Both the pottery and habitation structures are associated with Woodland materials and may indicate an eastern origin from the complex (Walker 1999).

During the same time period the Avonlea complex proliferated in southern Saskatchewan. Radiocarbon dates range from 1,800 to 1,150 years ago and this complex can be recognized by the presence of small side-notched points (Walker 1999). Pottery is also in evidence and there are three types: net impressed exteriors, spiral channeled exteriors, and smooth exterior vessels (Walker 1999). Procurement of bison was accomplished through bison jumps such as at the Gull Lake bison jump site.

The latter part of the Late Precontact period was a time of population movement, population increase, and new subsistence strategies (Walker 1999). The Prairie Side-Notched complex dates from 1,200 to 550 years ago and Plains Side-Notched complex dates from 550 to 170 years ago (Walker 1999). The Blackduck archaeological culture was present in northern Minnesota, in the boreal forest of Ontario and Manitoba and the plains of Manitoba approximately 1,200 years ago (Walker 1999). These people utilized Prairie Side-Notched

projectile points and might have expanded form the Great Lakes region (Walker 1999). Elsewhere on the Plains, specifically the northeastern and central regions, corn cultivation was in evidence. At this time, Middle Missouri villages appeared in South Dakota and later in North Dakota. Woodland influence involved a number of groups who all used Prairie Side-Notched points, distinctive pottery, and burial mounds. This may be associated with the presence of Algonkian linguistic groups (Walker 1999). Middle Missouri influence is associated with Siouan speaking groups such as Mandan and Hidatsa (Walker 1999).

Between 1,200 to 550 years ago Prairie Side-Notched projectile points and globular pottery are part of the Early Old Women's phase with sites including the Sjovold site and the Tschetter bison jump (Walker 1999). To the north, the Selkirk culture is another manifestation of Woodland influence related to the Pehonan pottery complex.

Small Plains Side-Notched projectile points appeared 550 years ago and are found in association with Mortlach pottery (Walker 1999). Middle Missouri decorative influences are also in evidence. With the arrival of European traders, horses, and guns about 170 years ago, the Precontact archaeological record for this region ends.

1.5 Structure of the Thesis

The thesis is structured in the following manner. First, a description of the scheme of classification for Plains Indian Rock Art suggested by Keyser and Klassen (2001) is presented. This provides a framework by which the southern Saskatchewan rock art sites can be evaluated. Methodology will be discussed as it pertains to the research conducted for this project. A detailed description of the rock art sites in southern Saskatchewan will be followed by a discussion of relevant sites and trends outside of the provincial boundaries. Finally, conclusions will be provided based on the current research and the placement of southern Saskatchewan rock art in the greater scope of rock art on the North American Plains.

CHAPTER TWO: REVIEW OF ROCK ART ON THE NORTHWESTERN PLAINS

2.1 Rock Art Traditions on the Northwestern Plains

James Keyser and Michael Klassen published *Plains Indian Rock Art* in 2001 and in this compendium they outline a number of Rock Art traditions that are present on the Northwestern Plains. This is a comprehensive study of the work of many researchers throughout the region and provides a framework for studying rock art in the Northwestern Plains as a part of a number of larger styles or traditions. This volume is extremely useful in classifying rock art on the Northwestern Plains and serves as a basis for organizing a review of rock art traditions in this thesis.

2.1.1 The Early Hunting Tradition

The Early Hunting tradition is thought to be one of the oldest traditions on the Plains. These images are pecked into the rock surface. For the most part, the images within this tradition appear to depict big game hunting. While sites had been recorded prior to World War II, David Gebhard carried out an extensive study of Northwestern Plains Rock Art in which he recognized an "early hunting style" (Keyser and Klassen 2001). In the 1980s, Linea Sundstrom and Gebhard independently continued to work on the chronology using both Whoopup Canyon, Wyoming and Dinwoody, Wyoming as well as several other sites in South Dakota. Alice Tratebas has begun to break this tradition into different styles or patterns although this research is not yet completely reported. This research will most likely lead to identifying more sites within the tradition (Keyser and Klassen 2001).

The rock art itself consists of a large number of animal representations with lesser numbers of depictions of humans and hunting equipment (Keyser and Klassen 2001). The

composition is important and seems to be constructed into elaborate hunting scenes. A number of different species are represented including, but not limited to, elk, deer, pronghorn antelope, rabbits, cougars, and turtles. In general, the bodies are completely pecked, however, the details of these animals vary widely. For example, the feet can be 'ball' shaped (see Figure 2 *"Ball Feet" Elk*) or show feet that are an inverted 'v' shape. Bent legs may represent movement.

Human figures, as previously mentioned, are much less numerous and are simple in form. The body forms include round-body, oval body, and stick figures (Keyser and Klassen 2001). Some are identifiable as male or female because, for example, some of the males are phallic. Many humans hold weapons or other tools and can be seen engaged in driving animals. Items of material culture include mainly those associated with humans engaged in hunting activities, however, some are found in isolation. These items include weapons, such as spears and staffs, goads, noisemakers, and loop lines (Keyser and Klassen 2001). Loop lines (see Figure 3 *Hunting Scene with Loop Line*) are found in the Black Hills area in South Dakota and "are long horizontal or vertical lines with semi-circular loops along one side" (Keyser and Klassen 2001: p. 79-80). These loop lines seem to be a form of corral, drive lanes, or nets. Animals are arranged into herds and in some panels human figures appear to be running alongside the herds as if moving them into a trap.

Keyser and Klassen (2001) conclude that it is virtually impossible to determine who the artists of the Early Hunting tradition were based on current information. They do suggest that members of several groups probably drew the figures because the rock art seems to span a fairly long time range. Explanations or interpretations of rock art sites from this tradition include the suggestion that the rock art functioned as sympathetic hunting magic, made as a part of ritual hunting magic or, more recently, shamanistic ritual themes, or teaching tools used to pass cultural knowledge from generation to generation.

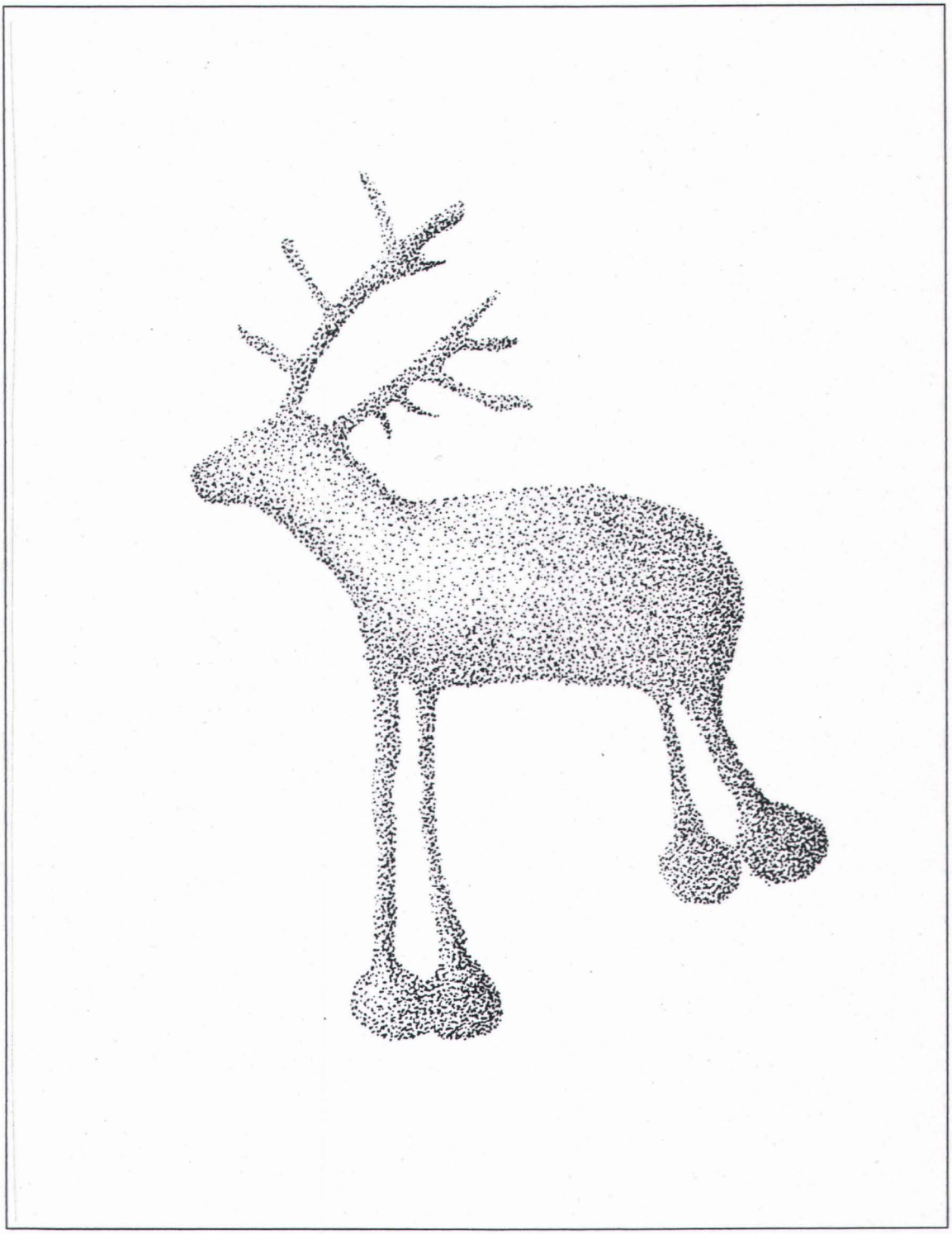


Figure 2 "Ball Feet" Elk
(Based on material from Keyser and Klassen 2001)
Drawing by E. Schneider

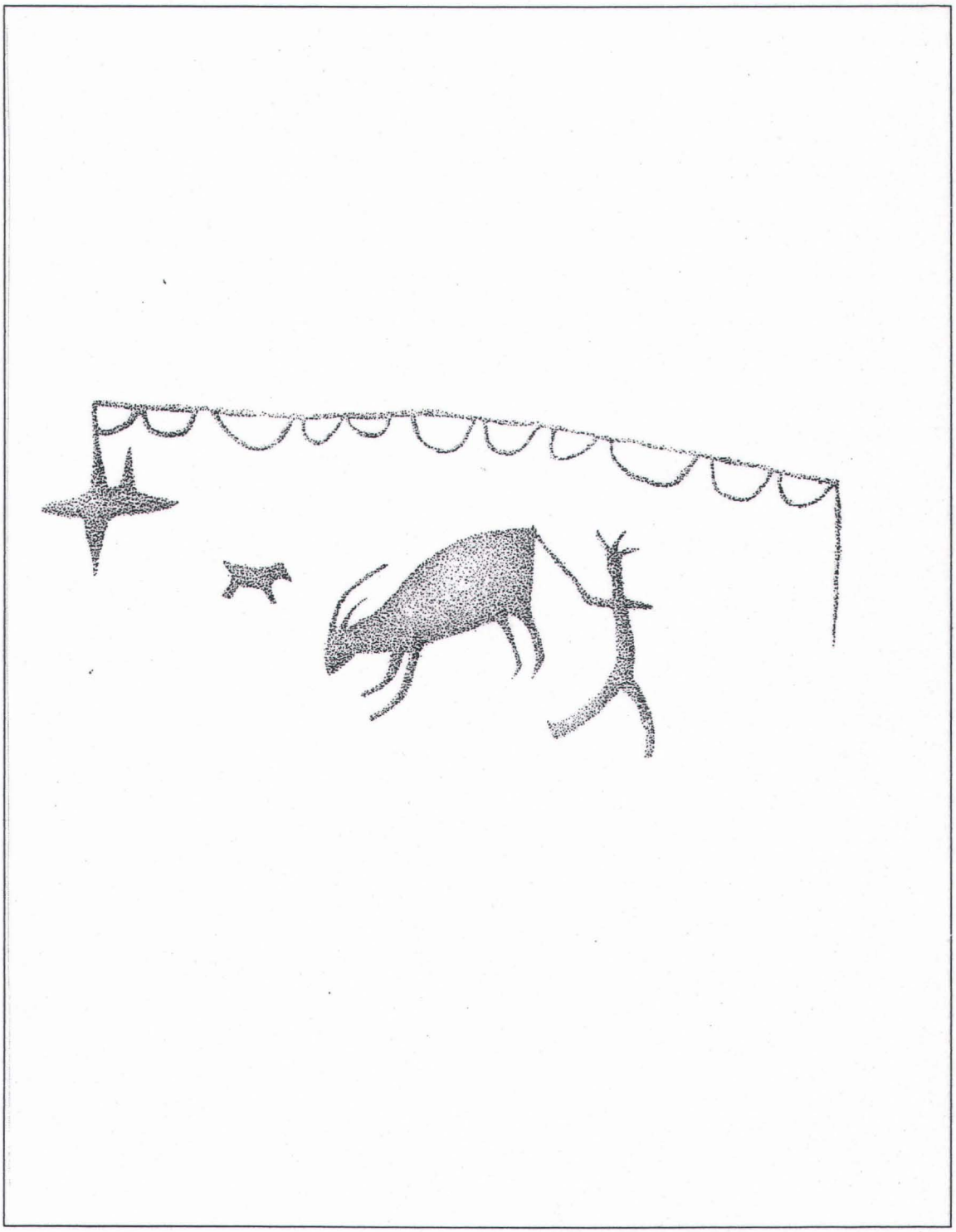


Figure 3 Hunting Scene with Loop Line
(Based on material from Keyser and Klassen 2001)
Drawing by E.Schneider.

2.1.2 The Columbia Plateau Tradition

The Columbia Plateau tradition can be found on the interior plateau of the Rocky Mountains, but spills over the Continental Divide onto the western margins of the Northwestern Plains. These sites can be found in the foothills of Alberta and west-central Montana. The pictographs in this region were first recorded in 1881, but systematic study began in 1908 (Keyser and Klassen 2001). Anthropologist Carling Malouf associated Montana pictographs with vision quest sites. In 1960, Selwyn Dewdney recorded similar sites in Alberta. More recently, this regional style has been described as the Eastern Columbia Plateau style which is a subdivision of the larger Columbia Plateau tradition (Keyser and Klassen 2001).

Both representational and non-representational images are found in this tradition. Humans are usually stick figures, however, a few block-body and outline forms can also be found. Details are not often depicted and as such, gender often cannot be determined. Rarely, human figures can be seen with cultural items such as weapons or drums. Animals can be found at fewer sites, however, they are a fraction more numerous than humans. Identifiable animal representations include bison, deer, elk, moose, caribou, mountain sheep, horses as well as dogs and turtles (Keyser and Klassen 2001).

Tally marks and geometric designs are also characteristic of this tradition. Tally marks consist of "short vertical lines painted in evenly spaced horizontal series" (Keyser and Klassen 2001) and are very plentiful. Geometric designs (see Figure 4 *Columbia Plateau Geometric Designs*) are also common in the Columbia Plateau tradition, however, they are less common in the region east of the Rocky Mountains. Images of this type include circles, rayed circles, ribbed figures, rake-like designs, zigzag lines, crosses and dots (Keyser and Klassen 2001).

The composition of Columbia Plateau rock art is generally simple and static. Juxtaposition occurs with both representational and non-representational images. It has been suggested (Keyser and Klassen 2001) that some of these glyphs could be quite old, as early as the Late Archaic, and may have lasted as long as the Late Prehistoric. Keyser and Klassen assert that like the greater Columbia Plateau region, rock art east of the Rocky Mountains was

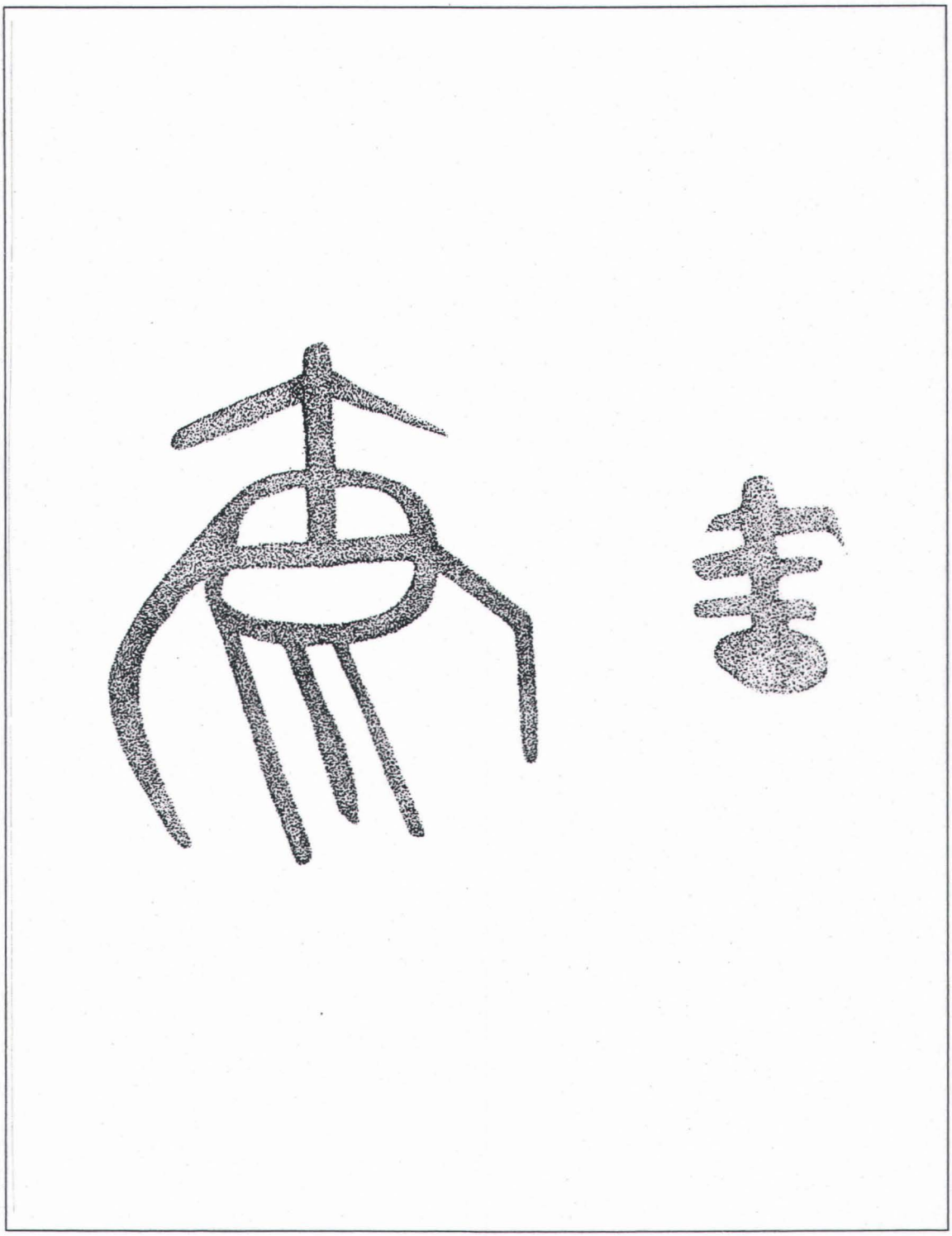


Figure 4 Columbia Plateau Tradition Geometric Designs
(Based on material from Keyser and Klassen 2001)
Drawing by E.Schneider.

probably done by Interior Salish groups such as the Flathead, and Pend d'Oreille in association with vision quest activities.

2.1.3 The Dinwoody Tradition

The Dinwoody Tradition includes a group of spectacular anthropomorphs found at various locations in Wyoming such as on the Wind River Reservation. The unique nature of these forms has attracted the attention of both archaeologists and laypersons, and as early as the 1870s records have been made of these glyphs (Keyser and Klassen 2001). Archaeologists and amateurs have published articles ranging from descriptions to relative dating schemes and more recently, Julie Francis and Larry Loendorf have conducted extensive research in the Bighorn Basin (Keyser and Klassen 2001).

The rock art itself has two major kinds of representations: abstracted anthropomorphs and animal figures. The anthropomorphs are the most common and are characterized as extremely elaborate and diverse in form. It is thought that these 'beings' represent spirits and not humans. The figures are pecked, stippled, or abraded onto the rock faces and are difficult to describe in a general way. Bodies can be tall or squat, facial features can be accurately depicted or show anomalies (i.e. one eye) and sometimes composite figures, made up of two or more anthropomorphs, one inside the other, are shown (see Figure 5 *Dinwoody Composite Figures*). The occurrence of interior pecked designs has prompted some researchers to include some Dinwoody rock art with the larger tradition of Interior Line Style found in the more southwestern United States. Fully Pecked figures are the second subcategory of anthropomorphs and have "solidly pecked torsos and horns, headdresses, or other forms of head decoration" (Keyser and Klassen 2001) (see Figure 6 *Dinwoody Fully Pecked Anthropomorphs*). Animals occur less frequently and are usually less elaborate. Animal figures that appear to be important in the Dinwoody tradition include "large Outline Pecked ungulates and smaller fully pecked canid and felid figures" (Keyser and Klassen 2001). These figures are

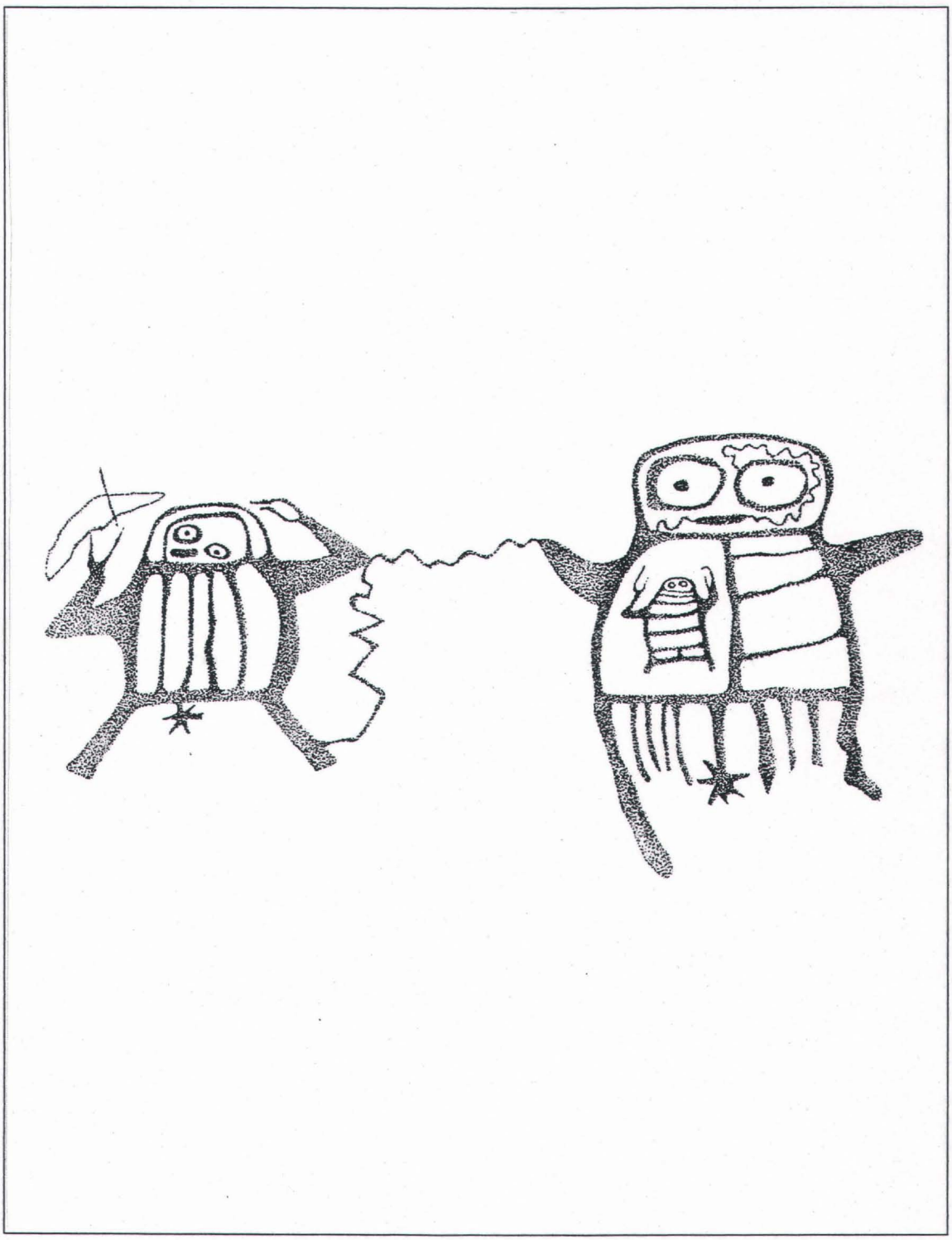


Figure 5 Dinwoody Composite Figures
(Based on material from Keyser and Klassen 2001)
Drawing by E.Schneider.

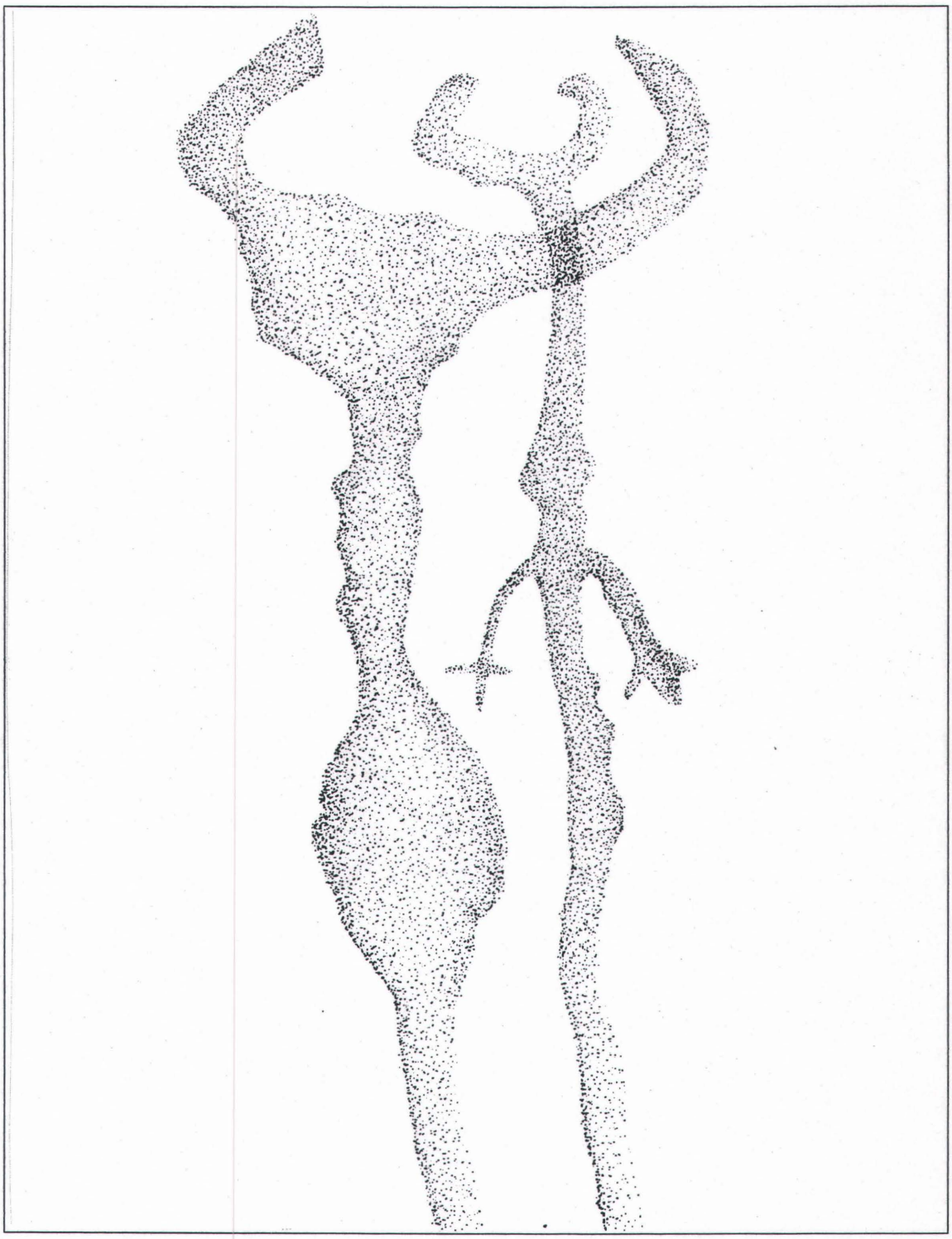


Figure 6 Dinwoody Fully Pecked Anthropomorphs
(Based on material from Keyser and Klassen 2001)
Drawing by E.Schneider.

not abstracted like the anthropomorphs, but are depicted more realistically. Items of material culture and abstract designs also occur, but in much lower frequencies than anthropomorphs and animal depictions.

Compositions are juxtaposed and static and, interestingly, some figures are seen to be emerging from or relating to cracks in the rock surface suggesting the rock surface itself was important to the rock art design. Superimpositioning suggests that the rock art is younger than Early Hunting tradition glyphs and at least Late Prehistoric at the other side.

Because this tradition is extremely limited in range, it is possible to assume that later glyphs were made by immigrant Shoshone. More research needs to be done to discover the earlier authors of this art as the age of the older images extends beyond the immigration date of the Shoshone (Keyser and Klassen 2001). It is believed that the Dinwoody tradition glyphs were part of shamanistic activities because of the interior designs and fantastical depictions. Archaeological evidence for this hypothesis has been found at the Coal Draw site in Wyoming where eight tubular stone pipes used to suck out spirits causing disease were uncovered in front of a petroglyph (Keyser and Klassen 2001).

2.1.4 The En Toto Pecked Tradition

The En Toto Pecked tradition consists of mainly human figures that are completely pecked and found in northwestern Wyoming and south-central Montana. This tradition is not well documented or studied, however, Stuart Connor first described some images in 1971 and later, Keyser, Loendorf and Francis did site recording and description (Keyser and Klassen 2001).

The images include mainly human and some animal forms. The humans are wholly pecked and often show exaggerated sexual features (see Figure 7 *En Toto Pecked Tradition Figure*). Animal figures are much less common and they are usually quadrupeds that are also fully pecked. Some depictions of items of material culture are also in evidence. The composition of these figures is usually groupings of human figures some of which are depicted

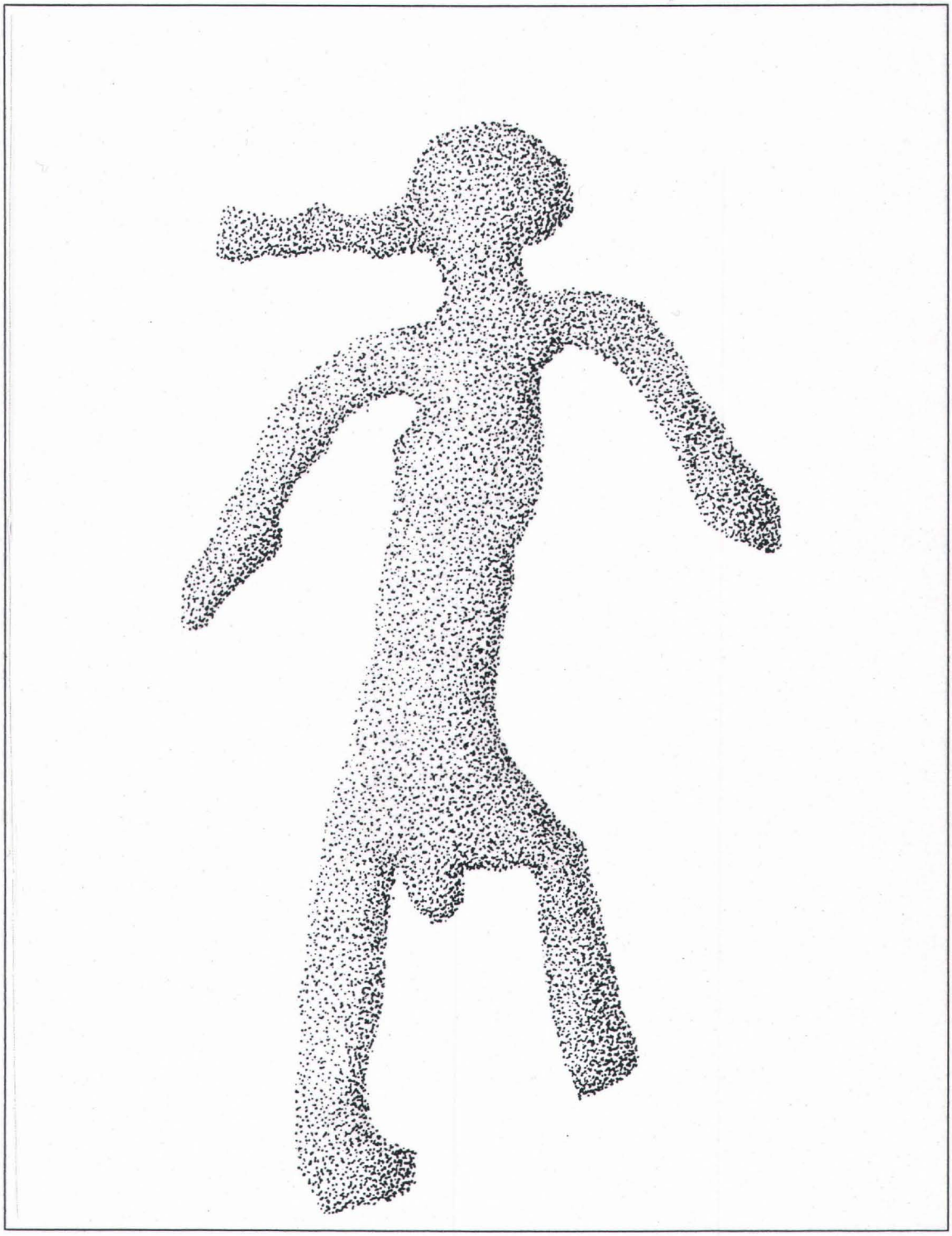


Figure 7 En Toto Pecked Tradition Figure
(Based on material from Keyser and Klassen 2001)
Drawing by E.Schneider.

with animal figures in association (see Figure 8 *En Toto Pecked Tradition Composition*). The compositions are generally static. The appearance of bows leads to the conclusion that these glyphs date to the Late Prehistoric period (Keyser and Klassen 2001). Some suggestions have been made, however, the cultural group that made these glyphs is not known at this time. The function is also unknown.

2.1.5 The Pecked Abstract Tradition

Images belonging to the Pecked Abstract tradition have been described as maze-like and are found primarily in the Black Hills region in South Dakota. The designs are petroglyphs that were first discussed by anthropologists in the 1930s (Keyser and Klassen 2001). Linea Sundstrom discussed this type of glyph in the 1980s, but more recent publications do not exist probably because of interpretation difficulties.

Keyser and Klassen have separated the images into two styles, geometric abstracts and representational motifs. Geometric abstracts can have representational elements, but are usually "complex curvilinear and rectilinear compositions in which individual elements are difficult to distinguish" (Keyser and Klassen 2001: p. 141). Elements include mazes, circles, ovals, squiggles, arches, and zigzags (see Figure 9 *Pecked Abstract Tradition Geometric Figure*). Representational motifs include simulated hand and footprints. These occur at only a few sites. Composition is usually long and horizontal in orientation.

Recent research by Sundstrom has placed the Pecked Abstract tradition as beginning in the Late Archaic and extending to the Late Prehistoric (Keyser and Klassen 2001). The authors of this tradition are as yet unknown, however, it has been suggested that the art is the result of entoptic phenomena observed by participants in shamanic trances.

2.1.6 The Foothills Abstract Tradition

The Foothills Abstract tradition is found in Alberta and Montana in the foothills of the Rocky Mountains. Keyser first proposed a Central Montana Abstract style based on common

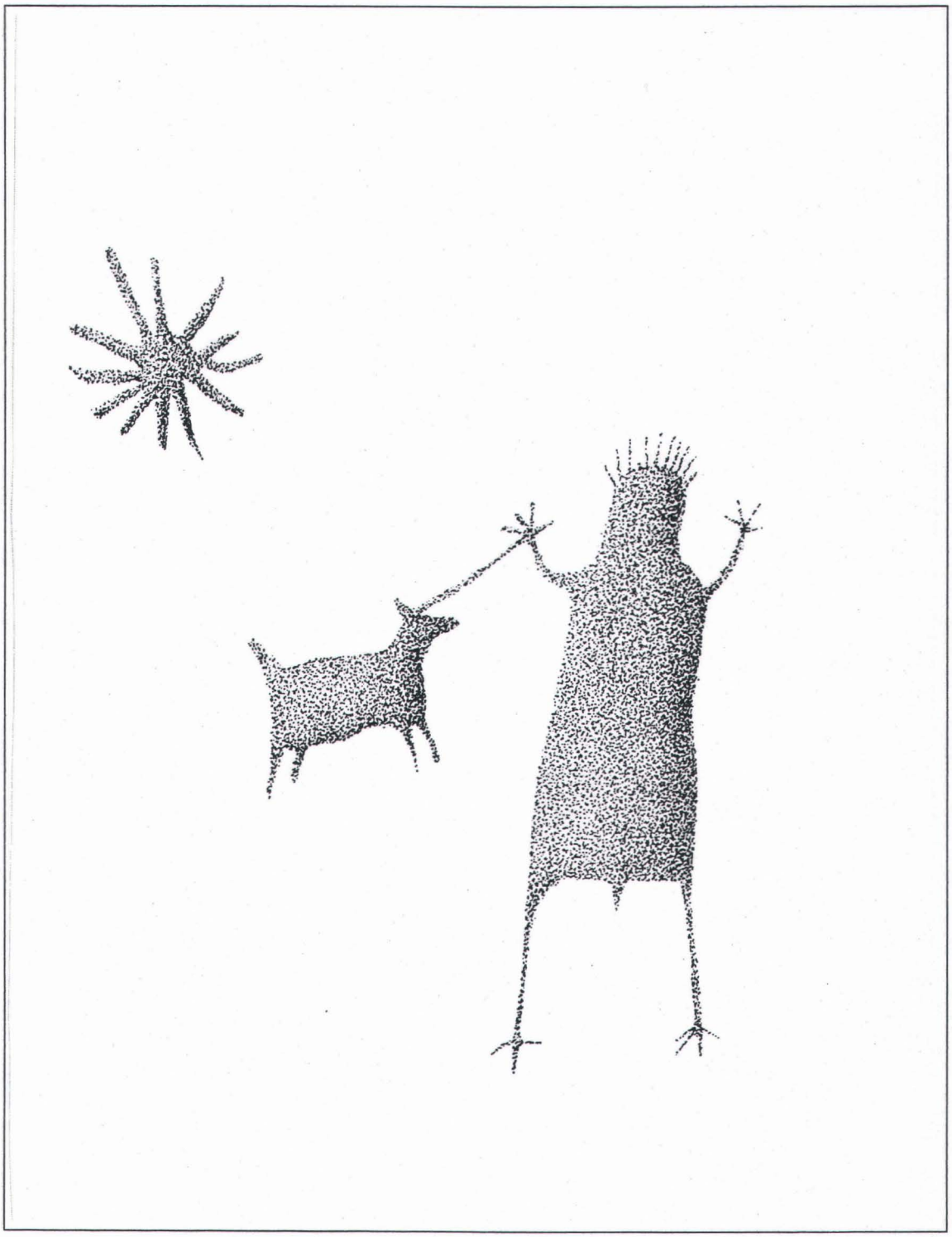


Figure 8 En Toto Pecked Tradition Composition
(Based on material from Keyser and Klassen 2001)
Drawing by E.Schneider.

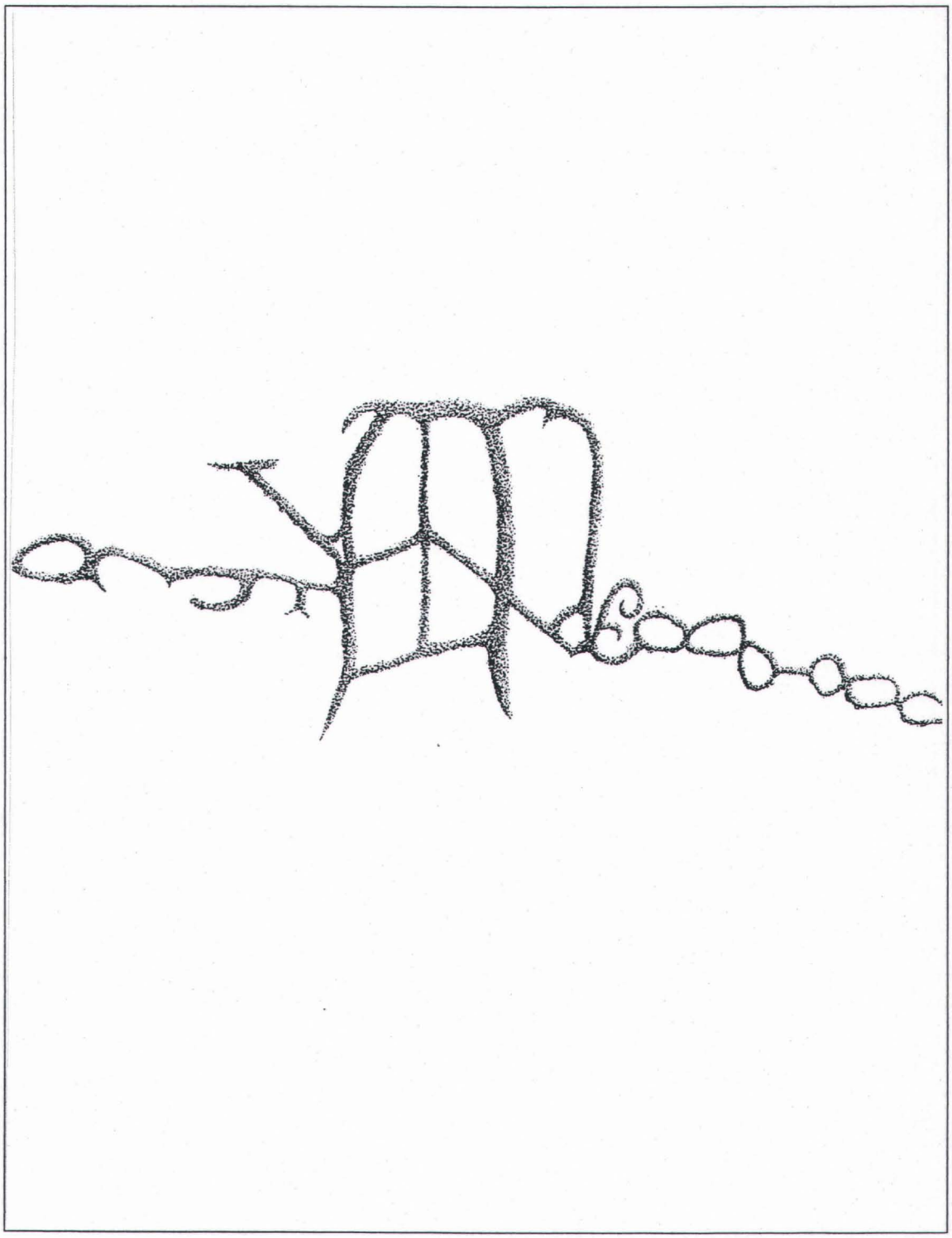


Figure 9 Pecked Abstract Tradition Geometric Figure
(Based on material from Keyser and Klassen 2001)
Drawing by E.Schneider.

motifs (handprints, stylized human figures) in the late 1970s (Keyser and Klassen 2001). Through further research, more pictograph sites were identified in Montana and Alberta causing the researchers to extend the style to a greater area.

The art consists of very diverse imagery including both representational and non-representational elements. Included in this list are human figures and anthropomorphs, animals and zoomorphs, masks, mazes, handprints, finger lines, smears and wall paintings, and geometric abstracts (Keyser and Klassen 2001). Human figures are varied in form, but many show foreshortening or absence of arms or legs. Some are shown 'flying' and still others have extremely extended legs and/or upraised arms (see Figure 10 *Foothills Abstract Shaman Figure*). Anthropomorphs are human-like figures abstracted to be what is assumed to be 'supernatural' in appearance. Some are simply maze structures with one human characteristic. Animals are less common, but include bears, bison, canids, elk, mountain sheep, and a number of unidentified animals. Zoomorphs, like anthropomorphs, are significantly abstracted. Some figures earlier thought to be anthropomorphs have now been identified as masks and mazes. Mazes are meandering lines, circles, rectangles, and dots. Handprints are also common and can occur alone or in groups. These can include both actual prints and simulated handprints. Hand stencils also occur but much less frequently. Finger lines are long streaks of pigment on the rock face and are quite common. Smears and painted walls "represent deliberate application of pigment for the purpose of coloring a large area of panel or a wall" (Keyser and Klassen 2001). Painted walls consist of areas where glyphs are painted over with pigment. Geometric figures occur in limited number and include lines, zigzags, v-shapes, circles, crosses, triangles, rectangles and groups of dots (Keyser and Klassen 2001). Most images occur singly, however, some are arranged horizontally or juxtaposed over one another. This tradition predates the Historic period and some evidence suggests it could be as old as the Late Archaic period. It is unknown who authored this rock art, however, it could have been done by Athapaskan speakers (Keyser and Klassen 2001). It is believed that Foothills tradition rock art was mainly ceremonial and the wide diversity of images leads researchers to conclude the art is

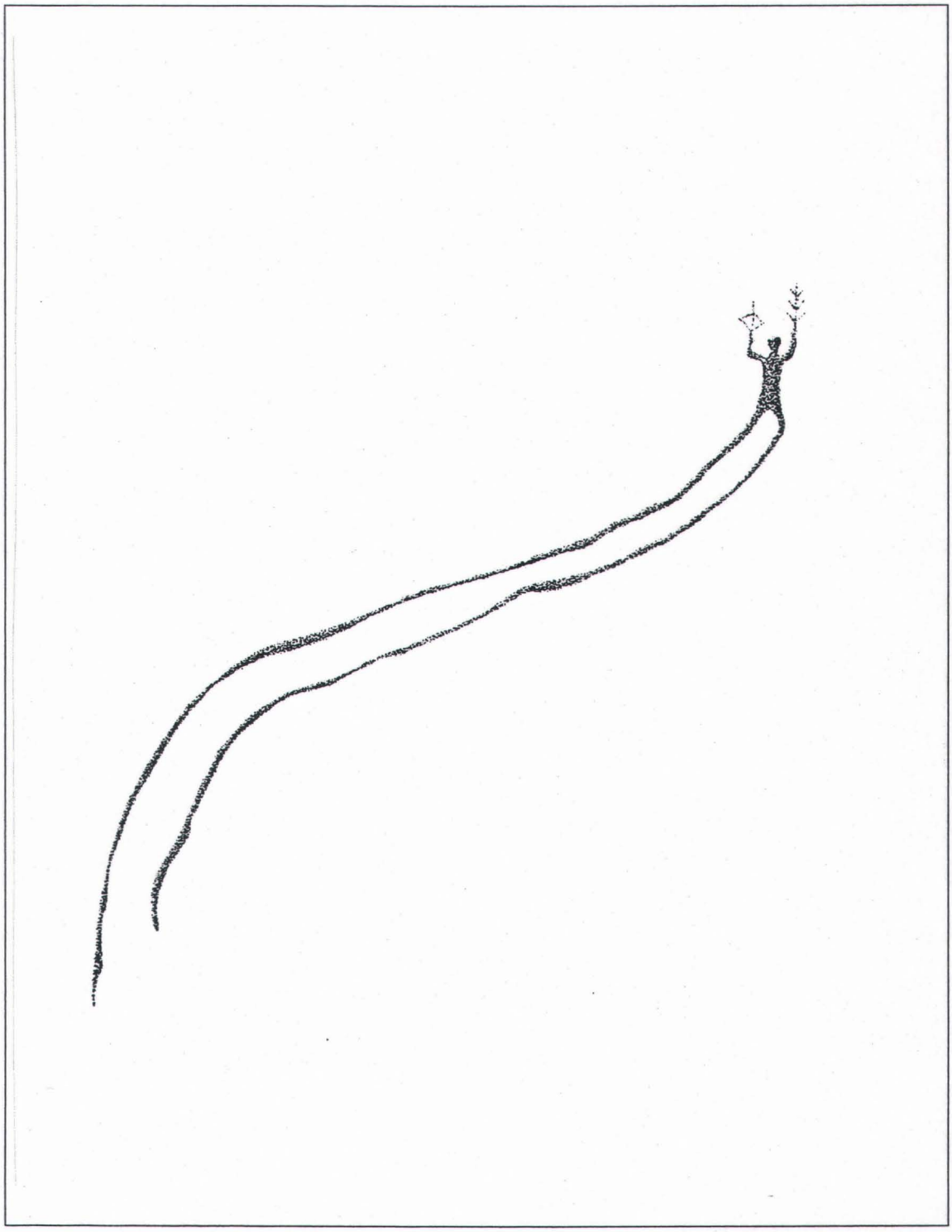


Figure 10 Foothills Abstract Shaman Figure
(Based on material from Keyser and Klassen 2001)
Drawing by E.Schneider.

individual in nature and may link to shamanism. Bear cermonialism seems to be quite important, as does the acquisition of shamanic powers.

2.1.7 The Hoofprint Tradition

The Hoofprint tradition consists of petroglyphs executed on vertical cliffs, horizontal outcrops, and on glacial erratics. The Northwestern Plains sites are thought to be the western-most extent of a much larger tradition that is common in the Eastern Woodlands (Keyser and Klassen 2001). On the Northwestern Plains, sites can be found in Alberta, Saskatchewan, Montana, Wyoming, North Dakota, and South Dakota. One of the earlier references to rock art of this type was made by a member of the Palliser expedition, James Hector, who in 1857 saw the petroglyphs at Roche Percée in southeastern Saskatchewan (Wintemberg 1939; Keyser and Klassen 2001). Images in South Dakota, Montana, and Wyoming were described in the 1950s and 1960s. Systematic research continued and in 1964, Buckles recognized the wider distribution of images belonging to this tradition (Keyser and Klassen 2001).

The subject matter includes animal and human representations, primarily in the form of tracks and prints. Other representations include human faces, bison depictions, animals, and projectile points (Keyser and Klassen 2001). Animal-based forms are the most common. Tracks occur at almost every site, most of which are life-sized. Tracks of cloven-hoofed ungulates include bison, deer, elk, pronghorn antelope, and mountain sheep. Other tracks include bird (see Figure 11 *Hoofprint Tradition Bird Tracks*), bear, horse, and felid or canid prints. Animal figures are also shown, such as bison heads (see Figure 12 *Hoofprint Tradition Bison Head*), turtles, snakes, and lizards. (Keyser and Klassen 2001) Human figures can be shown as hand or footprints as well as full figures and heads (see Figure 13 *Hoofprint Tradition Human Head*). There are also several instances of genitalia being shown and in some cases individuals are shown in sexual interaction with each other. Geometric designs found in this tradition include bisected circles, circles with crosses, and pit and groove motifs.

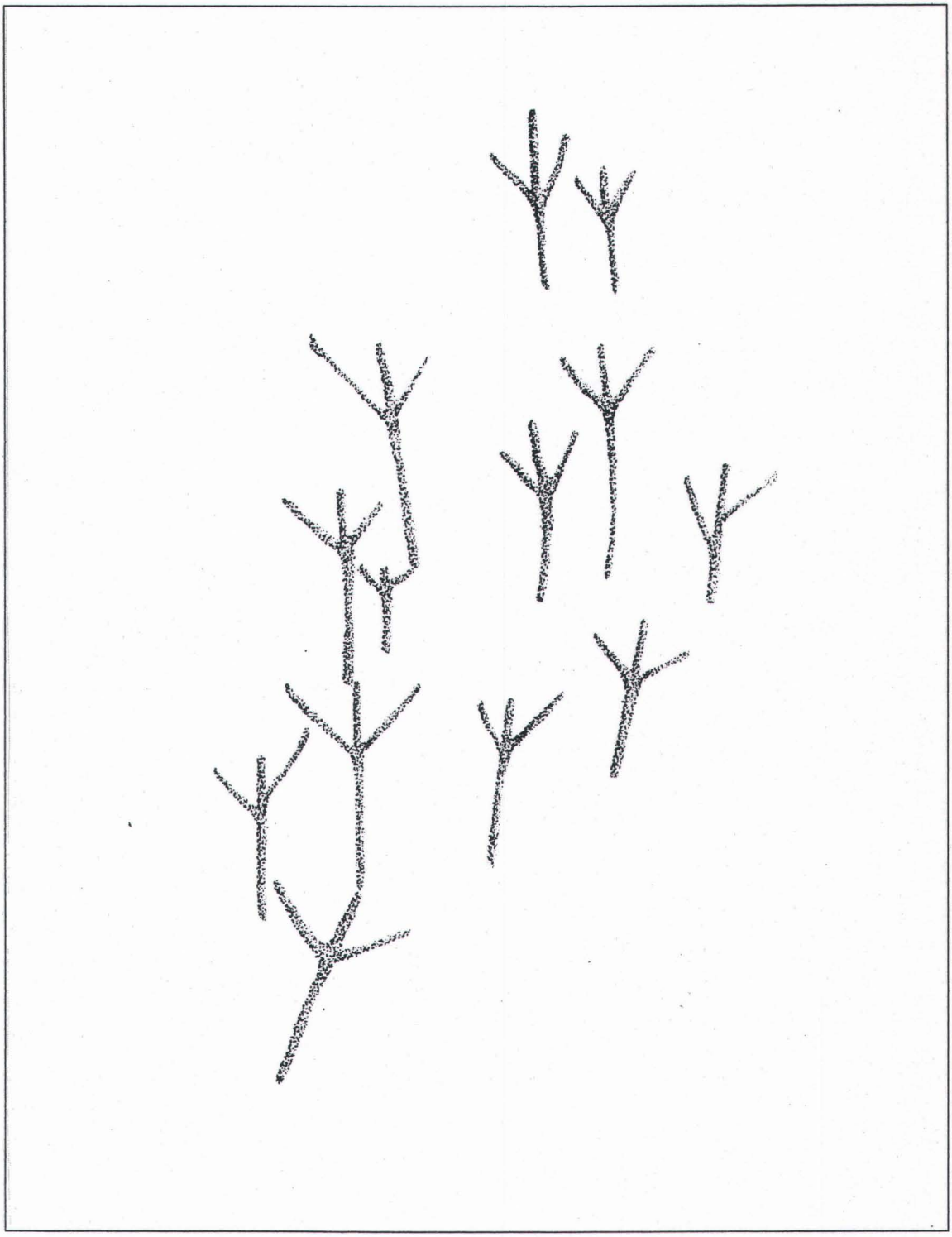


Figure 11 Hoofprint Tradition Bird Tracks
(Based on material from Keyser and Klassen 2001)
Drawing by E.Schneider.

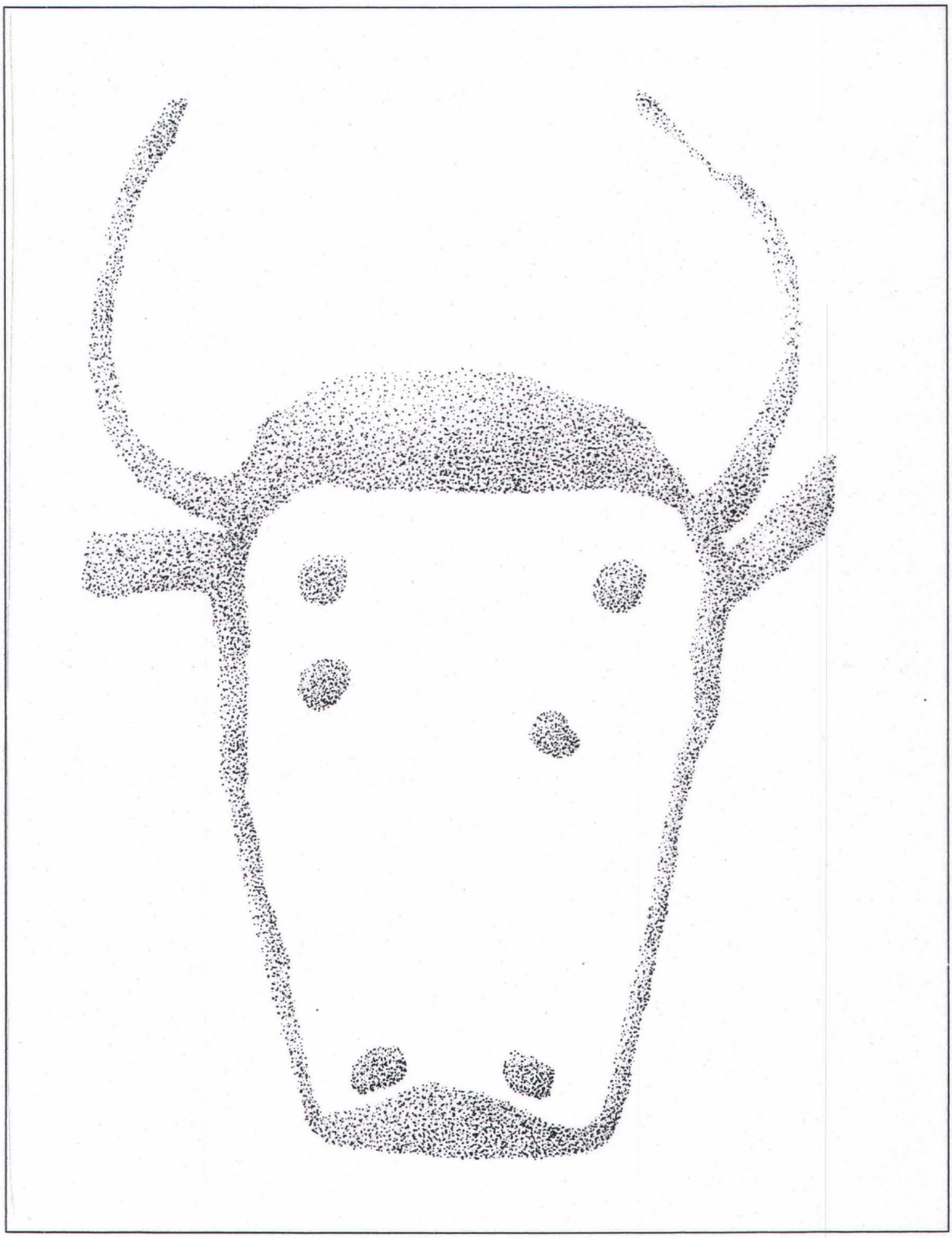


Figure 12 Hoofprint Tradition Bison Head
(Based on material from Keyser and Klassen 2001)
Drawing by E.Schneider.

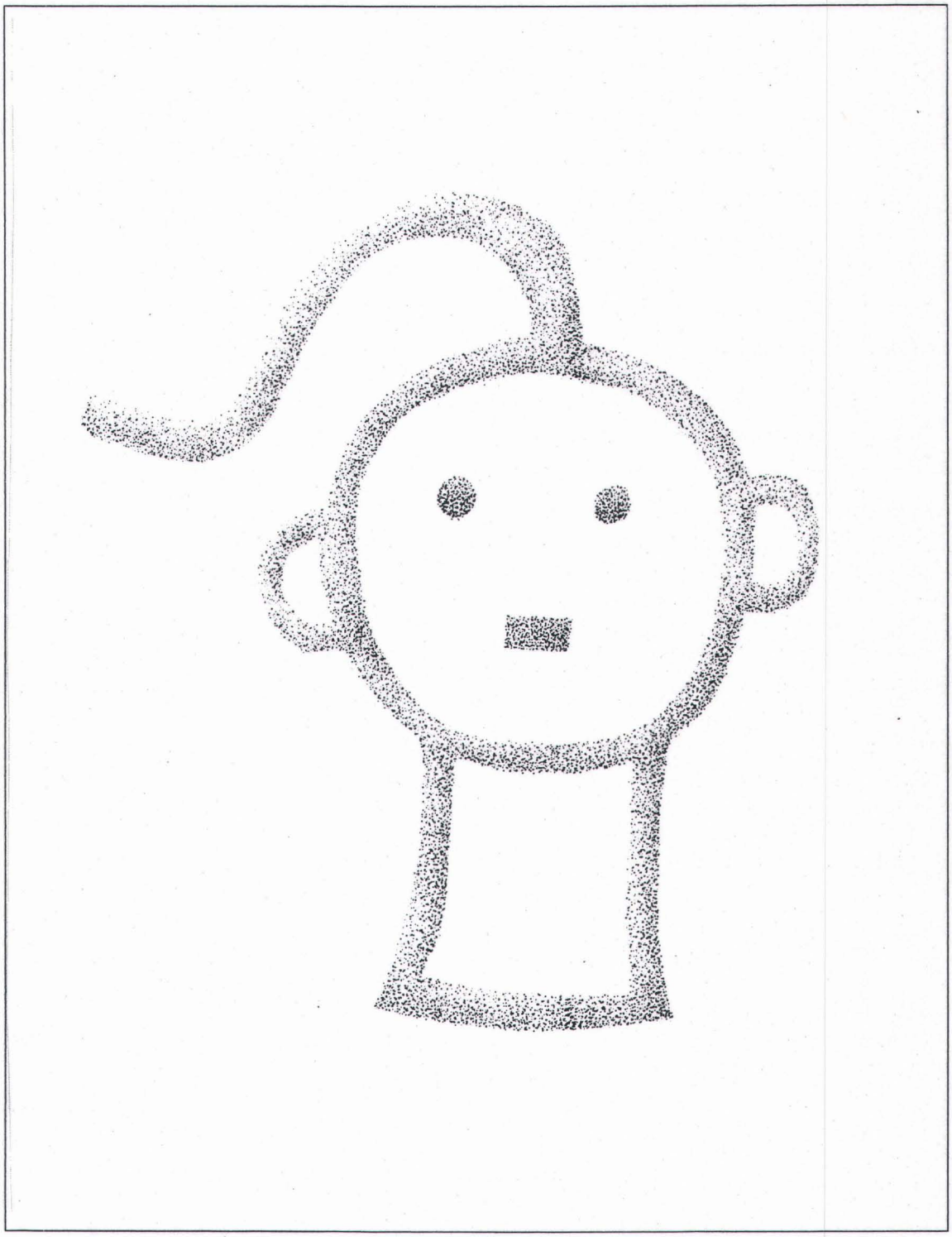


Figure 13 Hoofprint Tradition Human Head
(Based on material from Keyser and Klassen 2001)
Drawing by E.Schneider.

Compositionally, the sites are simple with clusters of prints being the most common. It is interesting to note that at two sites, one of them being St. Victor in Saskatchewan, tracks seem to lead off the cliff edge. The appearance of this phenomena may be influenced by the erosion of the cliff edge, however, some tracks arguably do seem to point to the edge of the cliff, as opposed to others which do not. It is difficult to determine the time period of this rock art tradition, but based upon a few glyphs, the Hoofprint tradition seems to date from the Late Prehistoric into the Protohistoric period. Rock art belonging to this tradition is thought to have been made by Siouan language speakers whose distribution from the Mississippi River to the Rocky Mountains closely matches the distribution of the rock art. There may also have been some Algonkian speakers creating these images although to a much lesser extent since Hoofprint motifs do not occur in other areas occupied by these groups. Interpretations of this imagery indicate the art has something to do with cosmological belief in women and bison providing life to people on the Plains (Keyser and Klassen 2001; Sundstrom 1981). This concept is an important aspect of Siouan speaking group's beliefs. Fertility imagery is also assumed because of the presence of genitalia. Turtle and thunderbird imagery is also important to these cultural groups and these images are present at quite a number of sites. The turtle "is symbolic of protection, longevity and the subterranean realm, in direct opposition to the thunderbird who rules the sky" (Keyser and Klassen 2001). Hunting magic may also be a function of these images. In ethnological studies, it has been noted that offerings have been left at rock art sites of this type, intended to take advantage of these supernatural spaces. Keyser and Klassen (2001) assert that the two functions are complementary which is not surprising considering the importance of the bison to Plains Siouan cultures.

2.1.8 The Ceremonial Tradition

The Ceremonial tradition is, as the name implies, related to medicine powers. These petroglyphs and pictographs are fairly common on the Plains and can be found from Alberta to

southern Wyoming. Since these images appear at noteworthy, spectacular sites (such as Castle Gardens, Wyoming), this tradition is fairly well documented. Early descriptions include those by Renaud in the 1930s and Gebhard in the 1950s (Keyser and Klassen 2001). Recordings of Pictograph Cave and Writing-on-Stone were undertaken in the 1960s. In the *Canadian Journal of Archaeology* in 1977, Keyser linked the rock art to Shoshonean origins and defined the 'ceremonial' and 'biographic' categories (Keyser and Klassen 2001). Refinements continue to be made regarding the Ceremonial tradition.

For the most part, the rock art consists of representational images. Human figures are stylized and include shield bearing warriors, v-necked figures and rectangular bodied humans. Shield bearing warriors (see Figure 14 *Shield Bearing Warrior*) have circular shields often blocking the torso with appendages and heads visible around the shield. Details are many times included, such as headdresses, facial features and/or genitalia. Some of the shields are decorated as well. The V-necked humans (see Figure 15 *V-Necked Figure*) have a 'v' shape as the defining point between the shoulders. The body is formed with two vertical lines and the legs usually extending from these lines. The arms extend from the uppermost points of the 'v'. Some are very detailed and some do not show much detail at all. Rectangular bodied humans (see Figure 16 *Rectangular Bodied Human*) are also outline forms that are similar to v-necked humans but do not have the distinctive 'v' shaped necks but such that shoulders go straight across. In images dating to the Historic period, human figures are mounted on horses. Animal figures are also conventionalized and executed in a simple and outlined fashion. Animals represented include bears, bison, elk, deer, mountain sheep, pronghorn antelope, skunks, dogs, birds, insects, turtles, and snakes (Keyser and Klassen 2001). There are three styles of animals: boat form body shape, mature style and naturalistic depictions. Boat form animals (see Figure 17 *Boat Form Animal*) have a distinctive boat or half-moon shaped body. Mature style animals (see Figure 18 *Mature Style Animal*) are characterized by flowing graceful lines defining the animal (usually a horse) in a few lines. Naturalistic animals (see Figure 19 *Naturalistic Animal*) more closely resemble the actual animal as it occurs in nature. Items of material culture are

also found in this tradition both associated with humans and on their own. Shields are clearly associated with humans, particularly the shield bearing warriors, but can also be found without the human figure. Images of weapons such as spears, bows and arrows, and guns are also in evidence.

The composition of Ceremonial tradition designs is static, but carefully arranged into single elements or juxtaposed groups that do not show interaction between figures. The Ceremonial rock art may date to the Late Archaic until the 1800s, but was at its height during the Late Prehistoric (Keyser and Klassen 2001). Subject matter has been the key to determining the age of the tradition. The origin of this tradition seems to be on the Northern Plains, however, because of its wide range it is difficult to tell which group is responsible. It is most likely (according to Keyser and Klassen 2001) that many groups on the Plains practiced this art style, perhaps even all of the groups on the Plains in the Late Prehistoric and Historic periods. Keyser and Klassen also suggest that the function of this rock art "is related to medicine powers derived from the spirit world" and depict specific iconic concepts, but not usually specific events (Keyser and Klassen 2001: p. 213). These iconic images give archaeologists an idea of what things had deep symbolic meaning in Plains societies. Oral tradition suggests these images were made by spirit beings. Keyser and Klassen note "such traditional accounts can be viewed as metaphorical explanations of the roles these images play in a cosmological worldview, as messages from the spirit world communicated through the hands of the artist" (Keyser and Klassen 2001: p. 220).

2.1.9 The Biographic Tradition

The Biographic tradition is closely related to the Ceremonial tradition both in location and time period. They share many designs and as the name implies, the Biographic tradition is more a 'story telling' tradition than the static, Ceremonial tradition designs. The biographical images are relatively simple and easily repeated. These images, like the Ceremonial tradition images, can be both petroglyphs and pictographs and were first observed by early explorers.

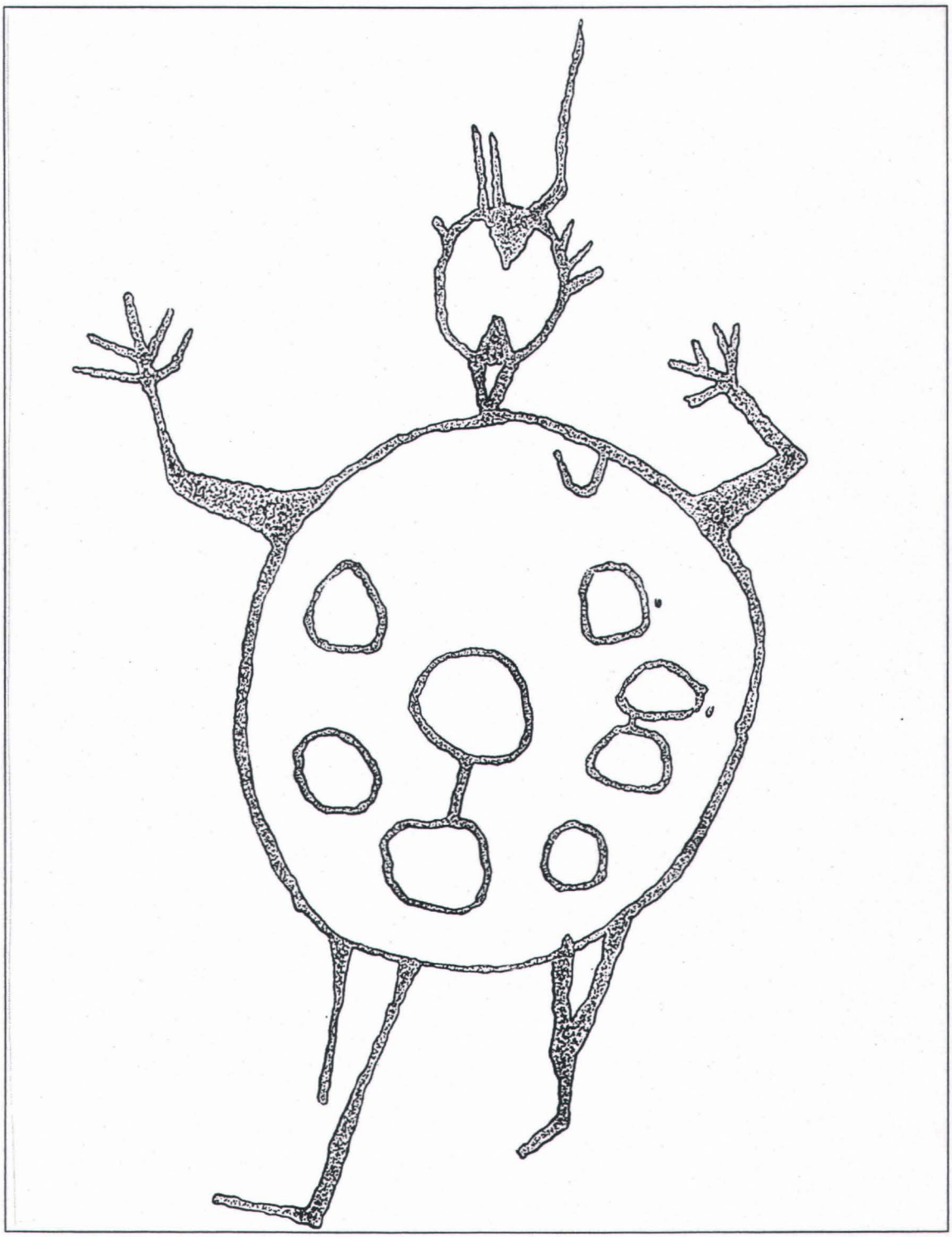


Figure 14 Shield Bearing Warrior
(Based on material from Barry 1991)
Drawing by E.Schneider.

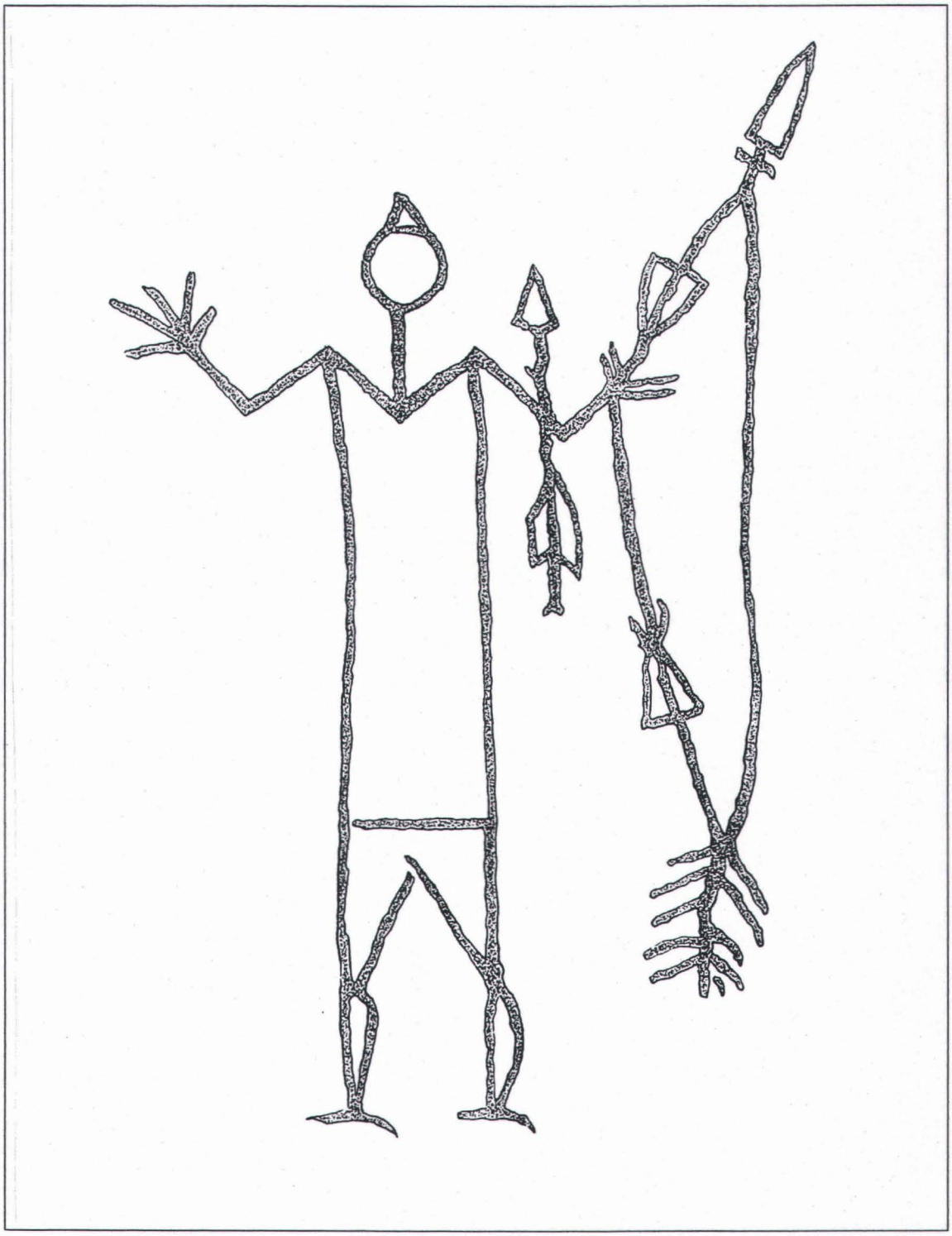


Figure 15 V-Necked Figure
(Based on material from Barry 1991)
Drawing by E.Schneider.

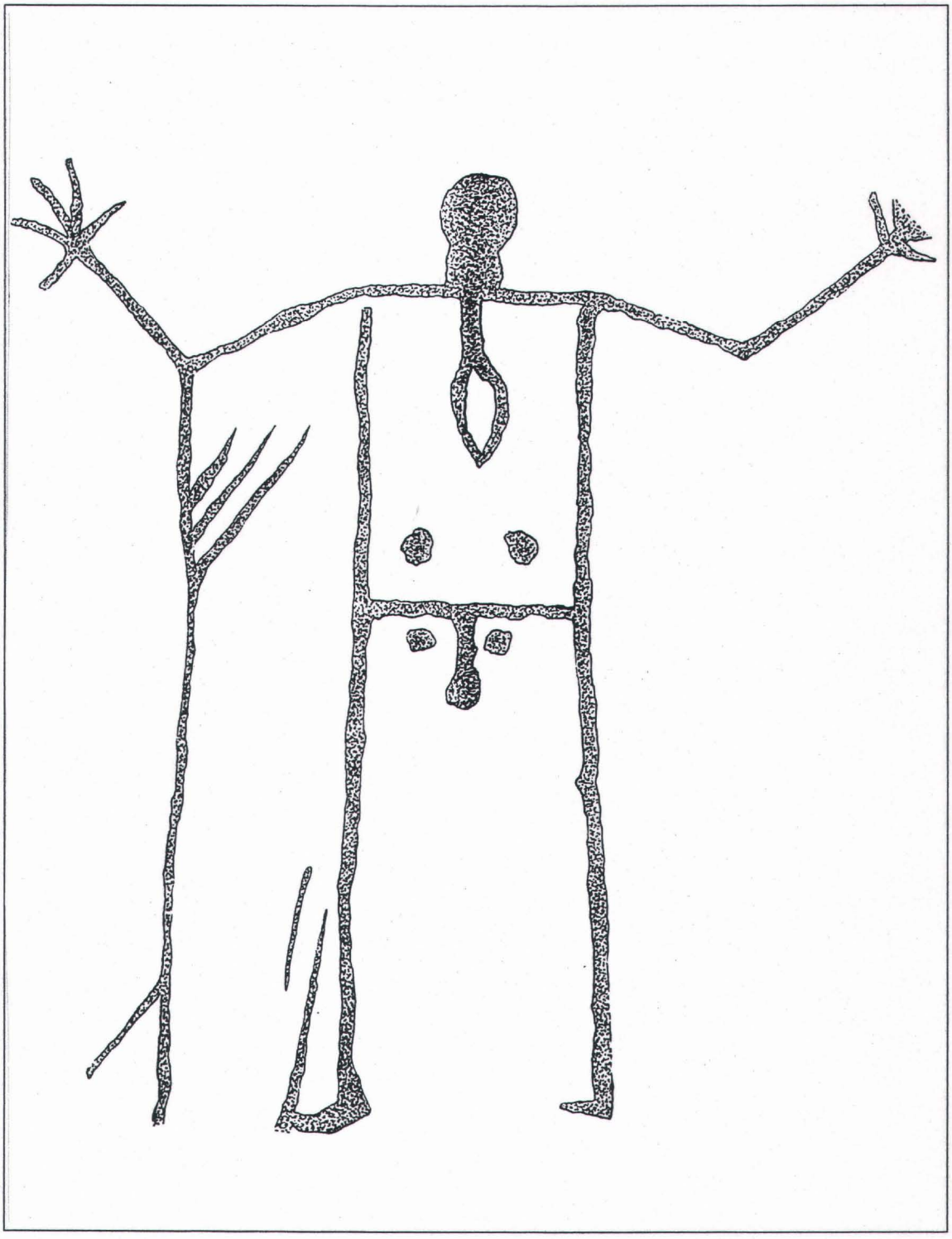


Figure 16 Rectangular Bodied Human
(Based on material from Barry 1991)
Drawing by E.Schneider.

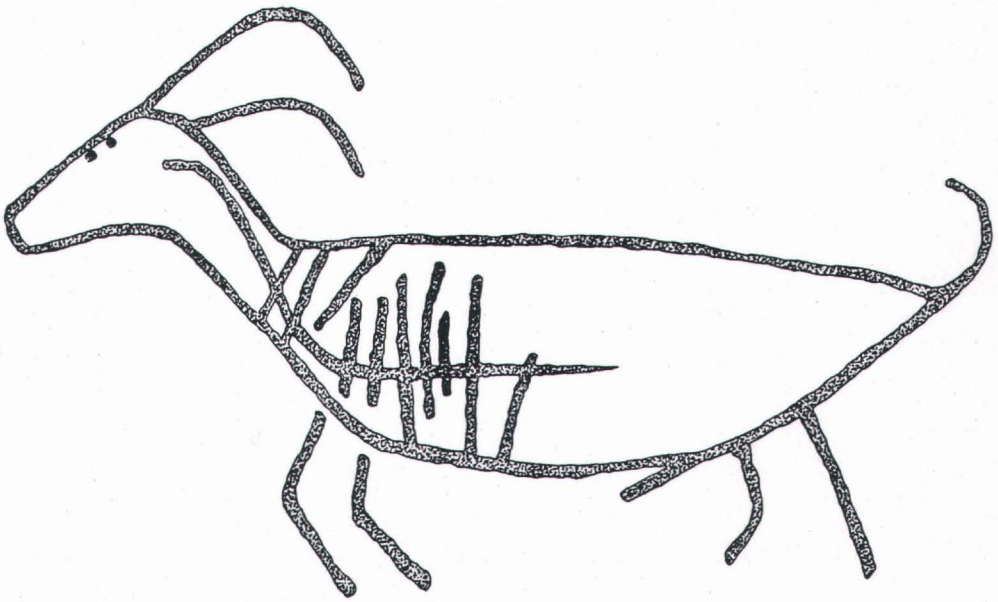


Figure 17 Boat Form Animal
(Based on material from Barry 1991)
Drawing by E.Schneider.

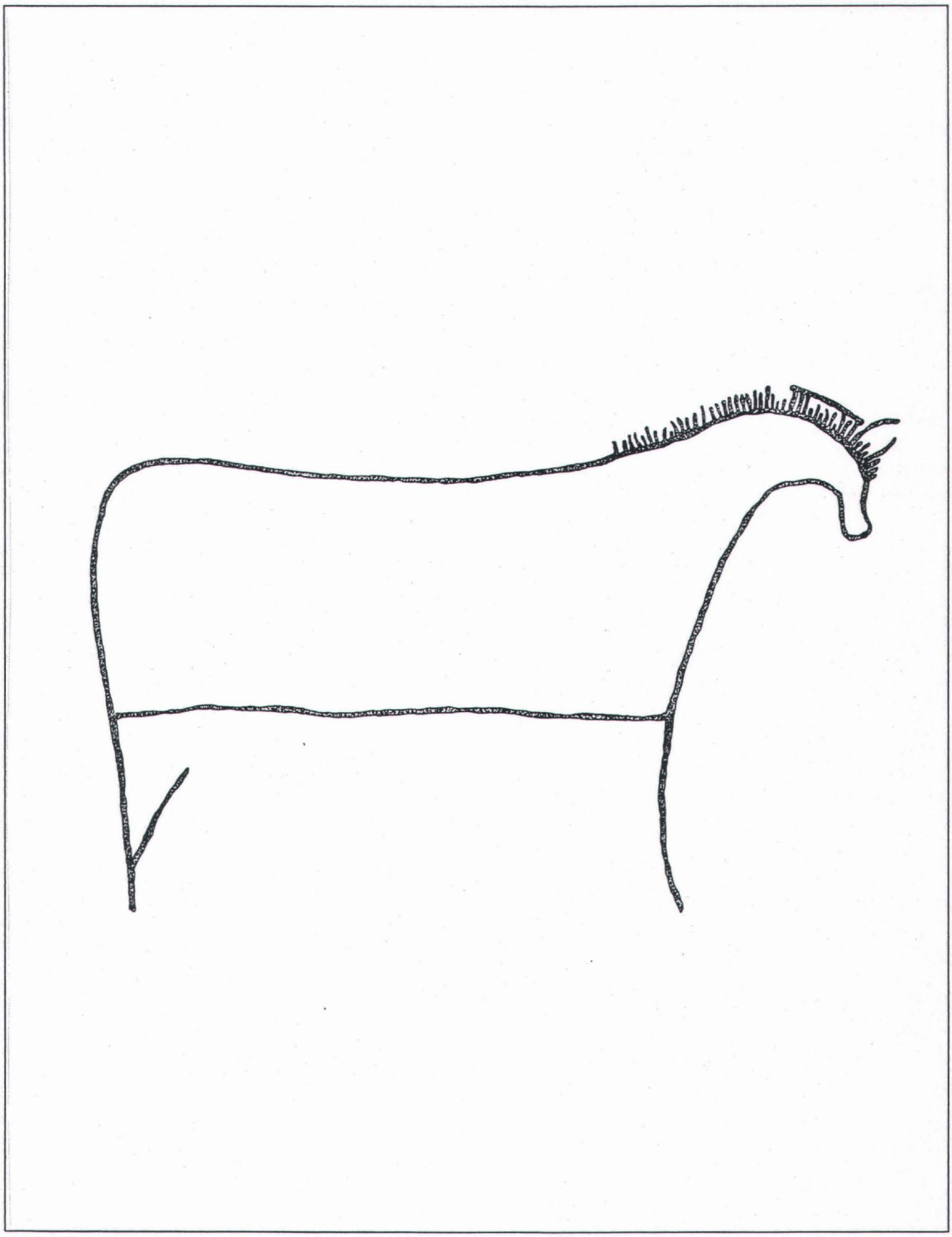


Figure 18 Mature Style Animal
(Based on material from Barry 1991)
Drawing by E.Schneider.

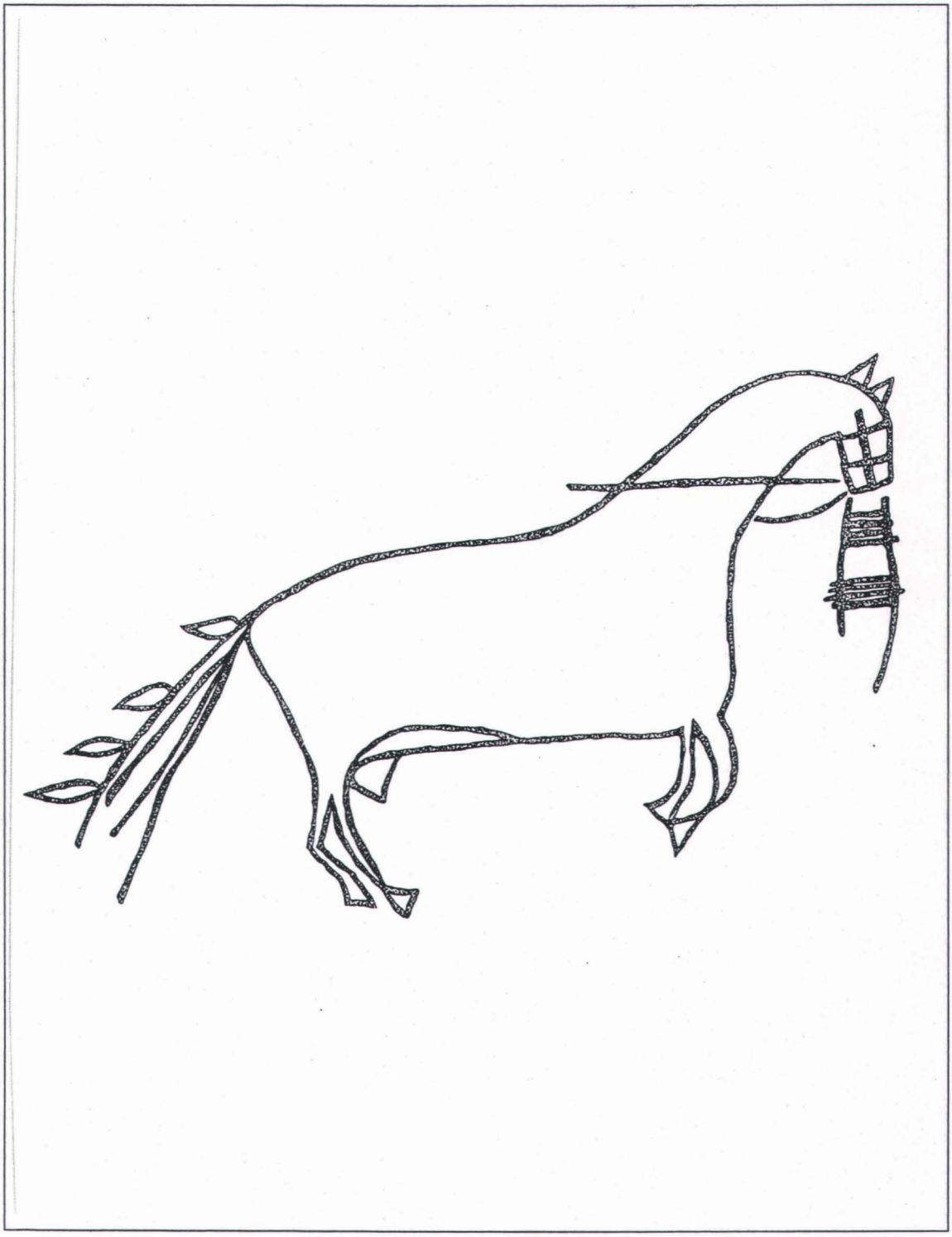


Figure 19 Naturalistic Animal
(Based on material from Barry 1991)
Drawing by E.Schneider.

The biographic or narrative aspect was noted as early as 1855 (Keyser and Klassen 2001). Selwyn Dewdney noted the 'action' of these glyphs when he did his work at Writing-on-Stone in the 1960s, however, Keyser made the distinction between the Ceremonial and Biographic traditions in 1977 (Keyser and Klassen 2001).

Human figures are much like those found in the Ceremonial tradition, but they are involved in more activity and interaction such as brandishing weapons or riding on horseback. Shield bearing warriors, v-necked humans and rectangular humans can be found, but triangular bodied humans (see Figure 20 *Triangular Bodied Human*) are specifically related to the Biographic tradition. Similarities with Ledger Art have been observed. Animals are usually in profile and outlined. Horses are the prevalent animals in this tradition. Items of material culture, both prehistoric and historic, are often depicted. Images of this nature range from weapons, to dwellings, to modes of transportation and beyond. Pictograms and ideograms are also in evidence. Dashes can indicate human footsteps and dots can represent the pathway of bullets (Keyser and Klassen 2001).

Composition is very important as it distinguishes Biographic scenes from Ceremonial tradition images. There are two types of composition, tallies of objects and animated scenes (Keyser and Klassen 2001). Tallies consist of repeated images such as guns and animated scenes can range from two or three interacting figures to complex battle scenes. The time frame for Biographical tradition art, like Ceremonial images, also stretches from the late Prehistoric into the Historic period based on subject matter and comparisons with images from ledgers, tipis and robes. Like the Ceremonial tradition and Ledger and Robe art, cultural affiliation seems to be shared authorship across many Plains groups. Biographic rock art is most likely a recording of events and accomplishments made by an individual. It is not unrelated to the spirit world, however, as important events also "demonstrate the power of a successful warrior's helper" (Keyser and Klassen 2001: p.244).

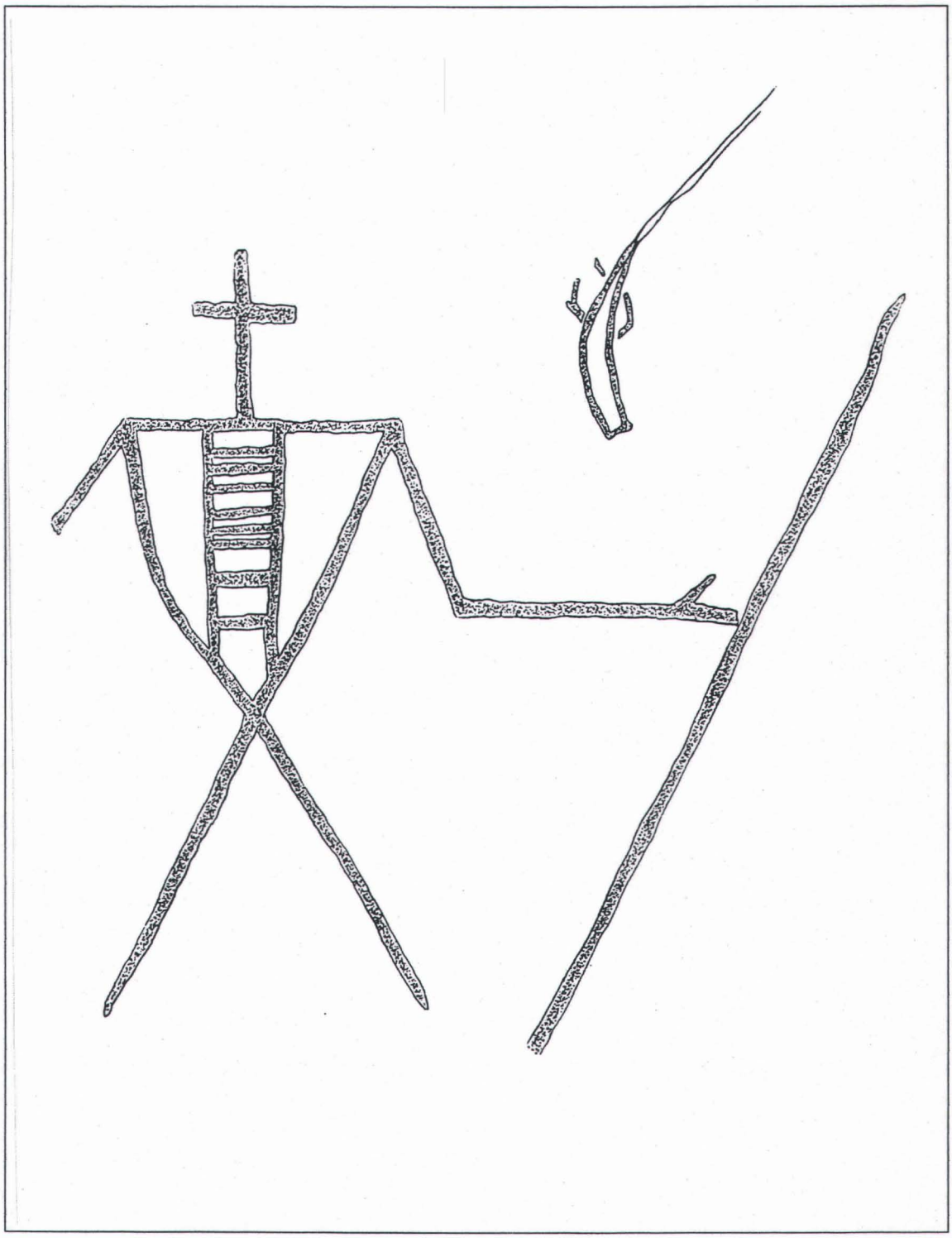


Figure 20 Triangular Bodied Human
(Based on material from Barry 1991)
Drawing by E.Schneider.

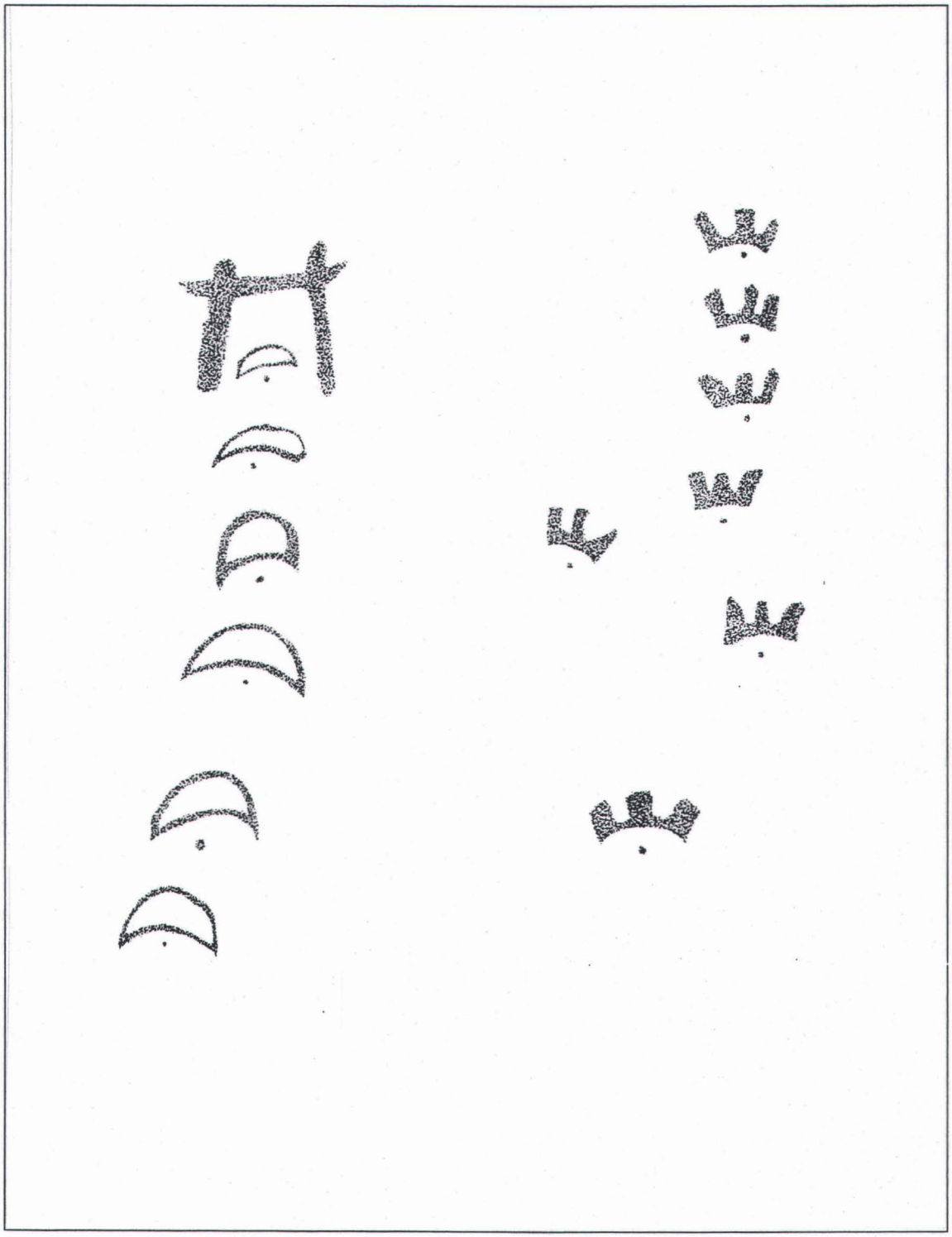


Figure 21 Vertical Series Rock Art
(Based on material from Sundstrom 1981)
Drawing by E.Schneider.

2.1.10 The Vertical Series Tradition

The final tradition is the Vertical Series tradition. These repeated, non-representational images are found in both petroglyph and pictograph form and are limited in range. This style was first recognized by Stuart Connor in the 1970s (Keyser and Klassen 2001). Linea Sundstrom has also conducted extensive research on the subject including attempts at interpretation.

The images are, as before mentioned, non-representational and for the most part, unidentifiable. Geometric shapes include circles, crosses, tridents, dots, rectangles, dashes etc. (Keyser and Klassen 2001). Complex images made up of several simple designs also occur (see Figure 21 *Vertical Series Tradition Rock Art*). Representational designs, such as horses, have been found in association with Vertical Series glyphs, however, these seem to be less important because of the infrequency of this type of association.

The composition involves the vertical arrangement of repeated symbols. Occasionally, horizontal arrangements can be seen, although more loosely arranged groups have also been observed. Dating, as one might assume is problematic, but limited evidence such as comparisons with robe art points to a Historical period origin. Sundstrom suggests a Siouan cultural origin, but Keyser and Klassen (2001) note the answer may not be that simple. Sundstrom's interpretation is that the Vertical Series functioned as a communication system based on "conventionalized symbols with standardized meanings" (Keyser and Klassen 2001).

CHAPTER THREE: METHODOLOGY

3.1 Introduction

The fieldwork for the following thesis was undertaken in the summers of 1999 through 2001 and museum visits continued into the winter of 2002. Some sites were re-visited in an attempt to procure accurate and good quality photographs. In all cases, the primary researcher was accompanied by a research assistant, Gloria Schneider.

3.2 Locating the Sites

Sites were located using several methods of research. Some of the sites are known Heritage Sites within Saskatchewan, such as St. Victor. Published reports proved to be a valuable resource for site location. These published reports included Buchner and Steinbring's (1998) report on the Southern Saskatchewan Rock Art Project. General archaeology newsletters and articles from Saskatchewan such as the Saskatchewan Archaeological Society newsletters were studied. In addition, word of mouth proved to be a very important method for locating rock art sites in the province.

3.3 Receiving Permission to Conduct Research

Permission for non-invasive low contact research was provided by the Provincial Heritage Branch, Saskatchewan. As well, permission from Saskatchewan Environment and Resource Management was granted on the grounds that a copy of the research was provided for that office. Permission from landowners was solicited through telephone calls prior to the research date and verbally on the day the study was conducted. In one case, a museum owner gave verbal permission provided that acknowledgement was granted within the thesis.

3.4 Going to the Site

Once a site was located and appropriate permission granted the site was visited. In all cases it was possible to easily reach the site by foot. At St. Victor, it was known that more glyphs were present on the edge of the cliff, however, due to lack of equipment and inexperience of the researchers in rock climbing, no attempts were made to record these somewhat inaccessible petroglyphs. In the summer of 2001, these glyphs were destroyed when the outermost edges of the horizontal outcropping collapsed.

3.5 Recording Procedures

Every attempt was made to thoroughly research each site prior to going to the location. This made finding the sites and the glyphs a much more straightforward task. Upon arrival at the site, a complete exploration of the surrounding area was conducted. This was to locate all of the rock art in the area and to make observations about the landscape and general impressions. These observations were recorded. Observations that were recorded included several different kinds of information. As mentioned previously, surrounding environment was noted. Observable weather conditions were also recorded. The direction of the rock face was taken with a compass and noted. The process of locating motifs and the ease/difficultly of this task was also recorded. Physical observations such as the condition of the rock surface, any noticeable damage due to environmental factors or vandalism, any visible vegetation and the type of rock (if known) were noted.

Extensive photographic recording was undertaken. Several cameras were used. The primary camera was a Cannon EOS 600 with the standard lens. In one case, a telephoto lens was employed. In addition, a Kodak 35mm camera was used to take a number of pictures. Several types of film were used in recording the rock art sites. Both colour and black and white film were used. The colour film photographs were found to be much more successful than that of the black and white photographs. Slides were also taken of the rock art sites. Colour film was Kodak, in speeds ranging from 200 to 400 ASA. Developing was done through a

commercial developer. Types of photographs taken include whole site photographs, close ups of the rock art motifs and photographs of the surrounding area. In many photographs, an identifier arrow was employed to indicate either 'North' or 'Up'. The scale in both metric and imperial measurements was also indicated on the identifier in addition to the site name. A record was made of the photographs taken, and in some cases, these photographs were linked to a map or list of motifs in order to make the later identification of motifs in the photographs easier.

Drawings of the elements were undertaken at the sites. In some cases, extreme weather, particularly wind, made it very difficult to accomplish this task with any success. Measurements of the elements were made in order to make scale drawings possible. Graph paper was used to draw an overall picture of some sites. Photographs were also used extensively to complete drawings of the motifs.

Additional miscellaneous recording techniques were also attempted. A string grid was used at St. Victor in order to clearly delineate the composition of the motifs as a whole. An attempt at aluminum foil impressions (see Sanger and Meighan 1990) was also made at St. Victor. In this process, a piece of aluminum foil is laid over a petroglyph motif. Cotton swabs or fingers are used to press the aluminum foil into the impression. Later, plaster of paris can be poured into the mold to make a "hard copy" of the glyph. Unfortunately, the motifs at St. Victor proved to be too shallow to make a significant impression on the aluminum foil. A more successful technique proved to be spraying water on the rock art. This was only done on rock surfaces that would regularly be affected by rainfall and thus would not be negatively impacted by moisture. Sanger and Meighan (1990) suggested this technique for making pictographs easier to see in their publication, *Discovering Prehistoric Rock Art: a Recording Manual*. It was discovered, however, that this technique also provides a good contrast for identifying marks on a petroglyph. This technique was found to be particularly effective in providing contrast in petroglyphs that were located in places with less than ideal light sources and/or in poor

weather conditions. It can also be noted that this technique was most successful on rocks that were dark in colour.

It is important to note that several recording techniques were *not* used. Chalking the petroglyphs was not employed. There was no excavation done and no removal of vegetation or soil was carried out. Casting was also not used. Rubbing was only undertaken in one case with the permission of the landowner. These techniques, although useful, were not used because of the negative impact they have on the rock art. In every case, extreme care was taken to record and preserve the motifs rather than damage them further.

CHAPTER FOUR: SOUTHERN SASKATCHEWAN ROCK ART SITES

4.1 Introduction

There are a limited number of rock art sites in Saskatchewan and even fewer in the southern portion of the province. For the purposes of this thesis, southern Saskatchewan has been defined as the region south of the Boreal Forest, generally, south of the line of longitude of the city of Prince Albert. To date, few publications have been produced regarding the rock art found in the province of Saskatchewan. T.E.H. Jones completed a master's thesis cataloguing the rock art found in the northern portion of Saskatchewan, specifically north of the 55th parallel. Jones included reproductions of images determined to be a northwestern manifestation of the Canadian Shield rock art style (Jones 1974). Jones also included locations, possible interpretations, cultural affiliations, and dates. Jones has also conducted research at a number of Southern Saskatchewan rock art sites, but has published little or none of this information. A number of short reports regarding southern Saskatchewan rock art sites have appeared in a variety of publications. Wherever possible these reports have been utilized for the purposes of this thesis research and have been cited within the information that follows. Publications include NAPAO and Saskatchewan Archaeological Society Newsletters, as well as references within several general overviews of Saskatchewan prehistory.

One larger-scale study has been conducted in southern Saskatchewan. It is often referred to within this thesis and was conducted by Dr. A.P. Buchner and Dr. J.H. Steinbring. The research and reporting occurred during 1991 through to the limited publication of their report in 1998. Bringing together a number of international experts, they also involved local archaeologists and laypersons to help discover and compile as much information as possible about several Southern Saskatchewan sites. These include the Herschel Petroglyphs, the Swift

Current Petroglyph, the Cabri Lake Petroglyph, and the St. Victor Petroglyphs. They also visited the Gouldtown Petroglyph, and Hazlet Pictograph, both of which were included in the report in less detail. Wherever possible, excavations were conducted at the rock art sites providing crucial and heretofore unknown information. This additional data enabled Steinbring and Buchner to make several conclusions regarding the various sites and their resulting information is often referred to within the following section.

In the subsequent section of the current research all of the sites visited, in addition to a small number of unvisited sites, are described. Accompanying drawings and photographs can be found in the Appendix (pg. 101). Drawings and photographic documentation are placed in the Appendix in order that comparisons can be made and images can be referred to at any point in the description or subsequent interpretive sections. The sites are organized geographically by their location from west to east within the province. The Crowstand Effigy is not believed to be in direct stylistic association with the other sites in Saskatchewan and therefore is listed first, not within the geographical organization.

4.2 Crowstand Effigy

Illustration appears on page 104, Figure A1.

The Crowstand Effigy was formerly located 4.8km east of Kamsack, Saskatchewan. The limestone boulder sat on a "120 foot-high hill [36m] on the edge of the Assiniboine River Valley" (Klaus 1968:75). It was originally reported by Professor A.S. Morton in 1938, but has since been destroyed (Klaus 1968).

The figure is unique in that it was not carved into the rock surface, but into lichen growing on the rock face. A bird motif, possibly a thunderbird, was inscribed onto the rock. The bird is lighter in colour than the surrounding lichen. The measurements of the figure are not reported, nor are the measurements of the boulder. The article by Klaus (1968) includes a photograph of the rock art taken prior to 1925 by John Wride from Kamsack. From a later photograph taken by an unknown photographer, the boulder is upside down as compared to its original position and it appears that the rock is large, approximately 1.2m in height and at least

as wide. The bird was situated close to the center of the rock face. The bird is solidly depicted with the wings outstretched and slightly down-turned. The head pointed to the left when one is looking at the rock face. The tail was fan-shaped with a concave bottom edge (Figure A1).

The place where the boulder was originally located was known as "Where the Crow Stands" or Crowstand (Klaus 1968). Klaus (1968) discussed the interpretations of the Saulteaux Indians and reported that the rock was connected to Gabriel Cote, head chief of the Saulteaux in the Fort Pelly area. Gabriel Cote was the first head chief of his family. The Hudson's Bay Company made him chief in 1854 and he signed Treaty 4 in 1874 (Klaus 1968). Gabriel Cote was succeeded by his son, Joseph Cote and later by his grandson, James Cote (Klaus 1968). The carving in the lichen had to be repeated because the lichen was continually growing. This scraping, according to historian Professor A.S. Morton, was the duty of the 'big-chief' (Morton Papers in Klaus 1968). Professor Morton also reported that the boulder was the site of ceremony. Klaus (1968) believed that the figure on the boulder was originated by Gabriel Cote. Katherine Capes of the National Museum of Canada also reported on the Crowstand Effigy (Klaus 1968). She noted that Chief Cote said that the bird was inscribed four generations ago and was re-scraped once each generation.

Professor Morton made attempts to protect the rock under the Historic Sites Board of Canada in 1926, however, he reported that vandals had made marks in the lichen to the point where the bird figure was nearly obliterated (Klaus 1968). Later, approximately in 1950, the stone was rolled down the hill in order that the land could be used for farming (Klaus 1968). According to Klaus (1968), the stone is now upside down and sits on the road allowance.

As mentioned previously, the bird motif is now completely obliterated, making the photograph from 1925 taken by John Wride even more significant. It is clear from Klaus' article (1968) that the boulder originally sat atop a hill and probably was fairly easy to see from a distance, as it was likely possible to see quite a distance from the location of the boulder. There has been no published information about any excavation at this site. Klaus (1968) published his article in *NAPAO*, the Saskatchewan Anthropology Journal, and the boulder was

mentioned in the Morton Papers of 1938. No other publications could be located. For the purposes of this research, the site was not visited as the rock art no longer exists.

4.3 Cabri Lake Petroglyph (EgOk-1)

Illustrations and photographs appear on pages 105-107, Figure A2- Figure A5.

The Cabri Lake Petroglyph is situated west of Cabri Lake, which is northwest of Leader, Saskatchewan. It was recorded by Eldon Johnson in 1992 (Buchner and Steinbring 1998) and is located on a hilltop. In the vicinity several stone formations have been identified including a circle and the Cabri Lake human effigy (EgOk-1). The rock measures 1.3 m across. The westernmost end is 90 cm high and the easternmost end is 86 cm. The boulder appears to be fine grained sedimentary rock.

The rock art itself consists of several precisely carved motifs (Figure A2). Two circles appear in close proximity to each other in the upper right hand of the face when the rock is viewed looking south. A short, thick line projects towards the south from the upper left hand circle (circle A) and continues until the edge of the rock face. A straight line extends down from the circle on the right (circle B) and connects with a long, roughly horizontal line. This line continues to the left and starts to undulate in a zigzag fashion towards the lower left hand corner of the rock face. Above and below this zigzag line are a series of dots or shallow cupules that are parallel with the zigzag. Close to the line connected to circle B is another vertical line that intersects the horizontal/zigzag line and has slight circular impressions at each end. Another shallow cupule appears below this line. There is a smaller circle (circle C) above the zigzag. It is bisected at a slight angle and the upper half is bisected again with a short straight line. Where all these lines intersect is a slight depression.

Between circle A and circle C there are two motifs. The upper motif consists of a slightly upwardly curved horizontal line with two straight lines extending upwards at converging angles. The lower glyph is composed of a straight vertical line with two outwardly curved lines

extending from the ends of the straight line towards the left of the rock face. The lower curved line is longer than the upper.

The boulder, as mentioned previously, is situated on a hilltop. It is in a cattle field with a number of rolling hills. The petroglyph is quite isolated and is difficult to find without a guide. As such, vandalism does not seem to be a large problem. Because it is on an exposed surface, it can be expected that natural weathering will have taken place and will continue to occur. Several other archaeological landforms are found in the area indicating that considerable activity has taken place in the vicinity. Buchner and Steinbring (1998) note that more archaeological work in this region could be helpful in learning more about the people who made the rock art.

Buchner and Steinbring (1998) did some excavation as part of their Southern Saskatchewan Rock Art Project. The methodology was the same as that at the Swift Current Petroglyph (see below), however, only 300 cm2 were excavated to a depth of 22 cm (Buchner and Steinbring 1998). Unfortunately, no cultural material was recovered in this excavation. No rock art was in evidence below the ground surface, despite the fact that the original ground surface seems to be below the present level. Disturbances from what was assumed to be rodent tunneling was also in evidence.

For the present research the site was visited once. Dr Robert Laing of Leader, Saskatchewan served as a guide who proved to be extremely helpful. Photographs were taken of the monolith as well as the surrounding area. Measurements of the boulder were taken and rough sketches were made for later use.

4.4 Leader Petroglyph

Illustrations and photographs appear on pages 108-110, Figure A6-A10.

In 1999 Dr E.G. Walker of the University of Saskatchewan was contacted by Dr Robert Laing of Leader, Saskatchewan, regarding a second possible petroglyph near Cabri Lake. Dr Laing spotted the markings after passing by the rock on his horse and glancing behind him. Dr

Walker determined that the boulder in the photograph he received from Dr Laing seemed to be marked in some way. In the fall of 2001, a visit was arranged and despite a somewhat gusty wind, the petroglyph and other sites of archaeological interest were investigated.

The rock itself is located in a field where cattle presently graze. It sits 'propped' against another rock in a rock pile that may classify as a small rock cairn. The rock appears to be dolomite greatly resembling the rock material of the Cabri Lake Petroglyph. The small rock is also located west of Cabri Lake, however, it is not located on a hilltop. It is found on a flat area from which point many of the surrounding hills and Cabri Lake can be seen.

The rock itself is quite small, measuring 42 cm high, and at its widest point, 40 cm across. The color of the rock makes it extremely difficult to see the rock art and even more difficult to produce quality photographs. The rock art can best be described as a number of scratches on the rock surface. The technique most likely involved using a sharp object to scratch lines into the near white rock face. As the lines are shallow (some more vague than others) it is difficult to discern what has been scratched onto the surface.

The series of lines can be seen more easily when the rock face is in shade, out of direct sunlight. Near the top of the rock face there are three short straight lines radiating from a thicker line that may be composed of two lines in close proximity (Figure A6). A small rake-like vertical line with three short straight prongs is directly below the previously described element. To the right (or west) is a sideways capital 'T' shape with what appears to be 2 or 3 dots between the rake and the top of the 'T'. The 'T' extends to the right/west and connects with another near vertical line. This line terminates on the bottom with a diagonal line connected at an acute angle and near the other end connects with a diagonal line at an obtuse angle. Both of these lines seem to end in a narrow 'v' shape. A more deeply incised, long diagonal crosses the horizontal line of the 'T' described earlier. This line terminates in several rake-like projections. Another more deeply incised line extends from the uppermost rake-like element across towards the west where it terminates with a cross. Other markings appear on

clear to see how this sizeable rock functioned as a meeting place and/or topographic reference point for travelers.

Buchner and Steinbring (1998) included the Hazlet Site in their southern Saskatchewan rock art study. The rock art itself is difficult to locate, but consists of a red ochre wash and three handprints. The rock has split into two pieces; a large piece of the northern face has exfoliated off the main portion. There is a plaque at the entrance to the site that commemorates the aforementioned importance of the erratic to early inhabitants of the area. It also states that the exfoliation occurred in 1850. Steinbring and Buchner (1998) note that this could provide a maximum age for the pictographs, however, they cast doubt on the age of 150 years because of the prehistoric style of the paintings.

An ochre wash on the narrow passageway is immediately apparent. The wash covers the north side of the boulder and ranges in color from a burgundy shade to an orange/red. There is no ochre wash on the opposing face of the exfoliated part. The furthermost left handprint was located first (#1). Shortly thereafter, a second handprint was located to the right and slightly below the first handprint (#2). Buchner and Steinbring (1998) identified two handprints, however, there seems to be a third, less complete handprint to the right of the second identified glyph (#3). The handprints were measured individually. Three measurements were taken from the base of the discernable palm to the longest fingertip, across the base of the fingertips and, in the case of the most complete handprint (#1), across the span of the fingertips at the widest point. Handprint #1 measures 19 cm from palm to fingertip, 12 cm across the base of the fingertips, and 16 cm across the widest point of the span of the fingers. Handprint #2 measures 21 cm from palm to fingertip and 17 cm across the base of the fingers. Handprint #3 measures 25 cm from palm to fingertip and 10 cm along the base of the fingers. The handprints appear to be stylized, rather than impressed images. With the exception of handprint #3, the measurements are within the size range for the average adult hand (15-20 cm from palm to fingertip) (Greer and Greer 1999). The appearance of

handprint #1 in particular is not consistent with an impressed hand. It may be that the artist first made an impression and then added pigment to it to make it appear more 'solid'.

In particular, handprint #1 (Figure A11) is definitely stylized as the thumb appears to be more in the position of a fifth finger than a thumb. Handprint #1 is the most solidly depicted print with the furthermost left digit being the lightest in color. Further exfoliation does not seem to have affected this glyph to a great extent and three small spalls are the only natural damage.

Handprint #2 (Figure A12) is less defined than handprint #1. It is also marred by at least two large exfoliations making the image less clear. Two distinct fingers can be seen. One isolated and faded finger is also identifiable to the right of the aforementioned fingers. A possible fourth finger appears to the left of the clearly depicted fingers and spalling has obliterated the area where a thumb or another finger may have occurred. Handprint #2 is also quite solidly depicted, however, the spalling damage has made if difficult to discern whether the handprint is impressed and enhanced with additional application of pigment or simply stylized.

Handprint #3 (Figure A13) is the most questionable of the glyphs and was not identified by Buchner and Steinbring (1998). It definitely appears to be more than simply the ochre wash covering the rock face. Very long fingers can be identified, as well as at least part of a palm. Two long slender fingers stretch out of what could be described as the left half of the palm. A third, more faint finger appears to the right of the two clearer fingers. It is difficult to say beyond that description as pigment does occur on either side of the glyph, but it is unclear whether it relates to the handprint.

A path in the grass was tramped down around the rock itself. It is also apparent that bison or cattle used the stone (and surrounding boulders) for rubbing as shiny, burnished spots are in evidence. The passageway where the pictographs occur is a shaded cool spot in the summer, out of the sun with a breeze blowing through it. The rock is situated on a relatively flat area from which one can see quite a distance. The rock is large enough to be seen from a

distance making it a landmark from travelers going north from the railroad to Gull Lake. One would imagine that this rock could have served the same purpose in precontact times. E. Breck Parkman, an expert on cup and groove petroglyphs from California and part of a research team involved with the Buchner and Steinbring (1998) study noted in his report that there was an associated stone cairn and a tipi ring. He also identified at least three handprints. Vandalism, in the form of initials and graffiti, does occur on the rock face where the pictographs appear and there is evidence of garbage and beer bottles in the area. Buchner and Steinbring (1998) note that it does not appear that the local residents are aware of the pictographs on the boulder, however, they would most likely be opposed to defacement if they were conscious of the rock art found there.

Buchner and Steinbring (1998) did not undertake any excavation at this site for their report nor were surface collections gathered. No other published information was found regarding this pictograph site. In the current study, photographic records, measurements and drawings were made. The site was visited on two occasions, however, the photographs taken were not of high quality. The glyphs were difficult to take pictures of because of the position of the rock face in the shady side of the erratic. The most successful photographs were achieved when water was poured over the handprints making the pigment stand out more clearly. The use of a camera flash was not generally useful as the light was reflected and showed up as a bright white spot on the developed photograph.

4.6 Herschel Petroglyphs (EjOc-3)

Illustrations and photographs appear on pages 119-124, Figure A22-A30.

The Herschel Petroglyphs are located 2 km southwest of the town of Hershel, which is found northwest of Rosetown, Saskatchewan. Originally the three petroglyphs were designated separately in the provincial registry, but later all three were included under EjOc-3. The Herschel site was first discovered in the 1960s by Henry Kosloski and was recorded by Dr. Ian Dyck and T.E.H. Jones. It was the first rock art site to be designated as a municipal

heritage site in 1988 and was included in Buchner and Steinbring's (1998) Southern Saskatchewan Rock Art Project. Many experts were brought to the site in an effort to discover the maximum amount of information about the boulders.

The main monolith (monolith #1) and the two smaller boulders (monoliths #2 and #3) are located between the Bear Hills to the north and the Bad Hills to the south. This area consists of "glacial till deposits abounding in irregularly shaped hills and numerous depressions or sloughs" (Buchner and Steinbring 1998). As such, the hilltop where the boulders are situated provides a good view of the surrounding locale including the town of Herschel. It is possible to visit the site if a tour is prearranged through the interpretive center.

The rock art varies in its degree of detail and complexity. Monolith #1 is the most detailed and the largest of the boulders. The rock face measures 1.7 m by 1.83 m at its widest point and is 0.9 m high from the present ground surface. The petroglyphs on the large flat rock face of monolith #1 include dozens of cupules (Figure A22). A central vertical line runs from the present ground surface to the top of the rock face. It is 'v'-shaped in cross section. The rock face is also divided by a number of horizontal lines extending outwards from the central vertical line. Some of these horizontal lines seem to be made up of straight lines of cupules that are very close together. Near the top of the rock face there are two bisected circles on either side of the vertical line. Each bisected half of the circle contains at least one cupule. Near the present ground surface at the bottom of the rock face is a curved line, part of another circle Buchner and Steinbring uncovered in their excavations at Herschel. The petroglyphs appear to extend quite a bit farther underground and consist of cupules and a circle to the left of the vertical central line (Buchner and Steinbring 1998). Buchner and Steinbring (1998) also note that the cross section of the vertical line seems to be more 'u'-shaped below the present ground surface indicating that the line above the excavation was probably deepened by subsequent visitors. Cupules extend beyond the flat expanse of the rock face onto the sides of the boulder.

Monolith #2 (Figure A23) is considerably smaller than monolith #1. The petroglyphs consist of a series of straight lines of varying lengths and a number of small cupules. A short vertical line crosses the top of the rock close to the narrowest point of the boulder. A long vertical line runs from the present ground surface to the top of the rock face. To the right of this line is a series of shorter straight lines. Two cupules appear on either side of two short straight diagonal lines. Two thicker, down curving lines are above and below the cupules and lines. Three straight lines appear to extend from the lower curved line and two of these are horizontally crossed with another line.

Monolith #3 (Figure A24) is again much smaller and consists of 'edge grooving" (Houston 1993). A number (8 or 9) parallel grooves appear along the edge of the rock. Some are quite deep while others are shallowly abraded.

Some vandalism has occurred at this site. Houston (1993) reported that illegal excavation had taken place between field seasons 1991 and 1992 when she revisited the site with Buchner and Steinbring. Trowel marks were visible and the location of the legitimate excavation had to be moved to avoid the disturbance. Dr Steinbring also noted scratches on monolith #1 as well as a bullet mark on the east face. At present, vandalism is at a minimum because the site is fenced and watched by citizens of the town. The interpretive center also helps to educate people about the site. Some damage to the petroglyphs has occurred due to freeze/thaw action and obviously this is difficult to prevent.

The monoliths sit atop a series of hills. A very good view of the surrounding area can be seen closer to the smaller monolith (#3), but not directly from monolith #1. A tipi ring has also been located near the monoliths and it has also been designated as a heritage site.

Extensive excavation has taken place between 1992 and 1994. These excavations were undertaken by Buchner and Steinbring as part of the Southern Saskatchewan Rock Art Project. Several interesting discoveries were made during the course of the excavation. Several specimens of faunal material were recovered in units near monolith #1. This material increased in frequency as the excavation got deeper. Samples from levels 5 and 8 were

submitted to Geocron Laboratories for radiocarbon analysis and dates of 1350± 80 BP (AD 680± 75) (GX-18515-G) and 1450± 75 BP (AD 580± 70) (GX-18514-G) were obtained (Buchner and Steinbring 1998). Non-diagnostic pottery and a triangular projectile point were also found which Buchner and Steinbring (1998) associate with the Avonlea prehistoric archaeological culture (see section 1.4.3 above).

In 1993 a very important feature was found in the units near monolith #1. It consisted of a roughly circular feature measuring c. 2 m in diameter made up of cobbles of a range of sizes closely packed together into a platform which is certainly cultural in nature. There were not many artifacts found in this feature, however, several beads, a quartzite scraper, and a sherd of precontact pottery were recovered. Lower levels contained faunal material, notably, cranial elements found near the central vertical line and long bone fragments on either side of the central line (Buchner and Steinbring 1998). A Prairie side-notched projectile point was found in an upper level of the stone feature. At a somewhat deeper level, a sample of faunal material from the feature produced a date of AD 750, placing it within the range of the Avonlea Complex (Buchner and Steinbring 1998). Buchner and Steinbring postulate that the sequence of events may have been as follows. First, the initial petroglyph engraving was completed (including elements located beneath the present ground surface) and deposition of artifacts (these events could have happened in sequence or at the same time), followed by the construction of the boulder platform. Buchner and Steinbring (1998) also state that they believe this construction most likely took place in a number of episodes as opposed to a single event. Through precontact and historic periods, people continued to visit the site at which point more modifications were made to the petroglyphs and the boulder platform.

Other interesting artifacts were found in the series of excavations on the western edge of monolith #1, including a number of brass objects. A brass disc 8 cm in diameter bears a pictogram with a central circle with three radiating lines. A brass bracelet was also recovered in addition to a number of beads. Several sherds of undiagnostic precontact pottery and a Prairie side-notched point were also found in this unit. Buchner and Steinbring (1998)

postulate that these were probably deposited at roughly the same time and were offerings deliberately placed by the monolith.

Units were also opened near monolith #2 and monolith #3. In both cases few diagnostic artifacts were found; at monolith #2, rodent bone and lithic fragments as well as a small triangular projectile point was found. Near monolith #3, 10 flakes, rodent bones and an end scraper were recovered. An unsuccessful shovel test program was conducted to find an occupation site as well.

Due to local interest and the significance of this site, a relatively large amount of work and a number of reports have been produced. The interpretive center, Earth Echoes, continues to provide education to visitors to the region. The research for the present study included visiting the site and taking a number of photographs and measurements as well as completing a number of preliminary drawings.

4.7 Swift Current Petroglyph (EbNw-15)

Illustrations and photographs appear on pages 125-129, Figure A31-A37.

The Swift Current Petroglyph is located on the land belonging to David and Dixie Green just east of Swift Current, north of the Trans Canada Highway. It was the second prehistoric site to be designated as a Provincial Heritage site in 1990 following a study conducted by T.E.H. Jones (Buchner and Steinbring 1998). This research led to a number of investigations of the site which will be discussed later.

The Swift Current petroglyph is found on a promontory which extends towards the west overlooking the Swift Current Creek. The monolith is a glacial erratic with the rock face bearing the petroglyphs facing southwest. According to tests conducted by Dr David Grisafe, the rock is almost pure dolomite (Buchner and Steinbring 1998). Measurements of the rock visible above the soil surface were taken for the purpose of this study. At its widest point the rock is 2 m across from approximately east to west and 1.8 m wide. The rock has split naturally and the petroglyphs occur on the portion west of this division.

The petroglyphs visible on the rock face (Figure A31) are quite difficult to see and photograph in low light conditions due to the light color of the rock. In this study, water was poured over the rock surface in order to highlight the differences in depth and make the glyphs more visible.

There are two zoomorphic figures. One (zoomorph #1) is approximately 50 cm from the top (northernmost tip) of the rock face. It is depicted in an outline form with at least two legs shown. What appears to be a curved tail occurs on the right (east) of the body and a possible head occurs to left (west). The second zoomorph (zoomorph #2) occurs below the 'head' of zoomorph #1. The second zoomorph has a completely pecked body and what looks like four straight stick legs protruding from the bottom of the body. Other glyphs include a long straight line that extends vertically from the bottom of the rock face and seems to fade when it passes the upper zoomorph. There may also be up to three short straight lines intersecting the long line near the top of its extension. At least three circles occur below zoomorph #1 and to the right (east) of zoomorph #2. Two of these circles are bisected; one on the diagonal and one horizontally. Another horizontally bisected circle occurs to the left (west) of the long straight line. Directly below zoomorph #2 is a zigzag line extending from ground level across the rock face ending approximately 10 cm below zoomorph #2. An interesting trident-like glyph can be seen to the left (west) of the long vertical line above the bisected circle. A small cupule occurs between zoomorphs #1 and #2 and two cupules occur above the vertical groove.

Buchner and Steinbring conducted excavations at the Swift Current Petroglyph site over three field seasons. In the course of this work, several pictographs were discovered on the monolith below ground level. These pictographs were not recorded as a part of the present study as no excavations were made. The following descriptions are based on Buchner and Steinbring's 1998 report.

The first pictograph was discovered in Unit 1. This was also the unit in which the vertical line and zigzag terminate. The pictograph (Figure A33) is described as a 'star-like'

figure with a triangular central point and three radiating lines made up of 'dots and dashes' that appear to curve in a counter clockwise direction. It is noted that the point and the entire figure is executed in black pigment. This figure occurs approximately 13 cm below ground level at the time of excavation (Buchner and Steinbring 1998).

The second pictograph was found in Unit 2 through levels 4-8. The pictograph (Figure A32) was identified as a quadruped measuring 46 cm long and was executed in black pigment. The tail portion is 17 cm long. Vertically it measures 21 cm. Buchner and Steinbring (1998) assert its two legs are probably a simplification of a four-legged animal. The body is flat on the bottom (plano) and convex on the top. There are two 'spines' on its back and two diagonal lines occurring on the interior of the body. The zoomorph has a long neck and on its head appears to have horns.

The third pictograph (Figure A33) is the faintest and was found in Unit 8 of the excavations. There are three lines radiating out from a central point also executed in black pigment. One of the arms is somewhat discontinuous but appears to extend over 40 cm. There are also three faint dots. This pictograph occurs approximately 22 cm below the modern ground surface. Samples of the pigment were taken and sent to the Texas A&M University to the Accelerator Mass Spectrometry (A.M.S.) facility to obtain a date. The A.M.S. date that was reported was 1262 $\pm$ 95 BP (GX-19730-AMS) (Buchner and Steinbring 1998).

The monolith now sits enclosed in a fence, erected in 1991, due to noticeable disturbance by cattle in the vicinity. It sits atop a promontory providing an impressive viewpoint for those visiting the site and is very close to the city of Swift Current. At one point it was considered as a potential site for tourist development. It is unmarred by any deliberate vandalism, most likely owing to the diligence of the landowners, and the fact that it is on private land and invisible from the highway. Most of the petroglyphs are quite deeply carved, but the surface is certainly subject to natural weathering. Interest in conservation issues led to Buchner and Steinbring's multi-disciplinary study conducted in the 1990s and oft cited in this thesis.

Some interesting information was gained through the excavations and studies undertaken. The excavations conducted around the monolith led to the discovery of the three pictographs. Several artifacts were recovered in the course of these excavations as well, including flakes of various materials and ochre, however, some units contained no cultural material at all. The lack of diagnostic material led to shovel testing to locate an occupation site. The shovel tests led to the excavation of the Green Site (EbNw-17), a potential occupation site located on the north bank of the creek. Bone fragments, fragments of tooth enamel, charcoal, shell and at least one flake were recovered, however, nothing of a diagnostic nature was found.

A core was taken from the monolith by Dr. David Grisafe from the University of Kansas. Dr. Grisafe concluded that the composition of the rock was such that chemical treatment would not be readily absorbed and would not help in conservation. The monolith was investigated by Alan Watchman of the Universitè de Laval in order to determine whether direct dating methods such as the focused laser extraction of carbonaceous substances (FLECS) could be used to determine a date. Unfortunately, this did not prove to be successful.

For this thesis project, the monolith was photographed both while wet and dry. Pouring water over the rock face did seem to enhance the carvings in photographs. Measurements of the rock were taken and details about the surroundings were recorded. Drawings were also done of the carvings for use later in more detailed drawings. It is difficult to assess the state of erosion since previous studies as the photographs in Buchner and Steinbring's 1998 report are photocopied and it is somewhat unclear how deep the carving was at that time. Previous studies have not been published and were not available. Obviously, since the monolith is located on an open hilltop, natural erosion is an issue. Vandalism, as discussed previously, does not seem to be a factor.

4.8 Gouldtown Petroglyph

Illustrations and photographs appear on pages 130-131, Figure A38-A40.

The Gouldtown Petroglyph was originally located near the town of Gouldtown, Saskatchewan. Its present location is on the land of John Wright in his farmyard. It is unclear where the exact original location was, although Mr. Wright has stated that the petroglyph is in the original orientation as placed by his father.

The boulder now sits very close to a shed directly south of the Wright's house. Its proximity to the building makes it difficult to photograph. Buchner and Steinbring (1998) note that "this makes the glyphs difficult to see (and photograph) in the summer and probably the autumn too. The best time of day would appear to be about 6:00 pm at the height of summer, but at that time much of the monolith is in the shadow of the nearby shed". The rock itself is granite, which is unusual (Buchner and Steinbring 1998). The face which bears the petroglyph slopes towards the east with the southern side bearing a number of cupules.

The rock face measures approximately 1m 10 cm across its widest point and 60 cm in height. The bottom edge of the face is 30 cm from the present ground surface and the back side of the boulder is 1 m across. The carving itself is quite striking (Figure A38). It appears to be a zoomorph; Buchner and Steinbring (1998) identify it as a turtle. The head points down towards the ground. The body of the zoomorph is an oval shape. There are a number of carvings on the interior of the body. A diagonal line crosses the body just below "shoulder height". There are two rake-like forms that seem to originate from or intersect with the diagonal line. There is also a cupule to the left of the rake-like forms. Two cupules appear to the right of the rake-like forms. At least four stick legs project from the body. On the left, as seen when facing the carving, one stick leg projects out and then down towards the head at an angle. There is another stick leg above the first that projects out then points up at an angle. The upper "leg" ends in four projections resembling a stick hand. Faint carvings appear connected to this "star hand". One line extends at an angle away from the main petroglyph. A slightly curved line crosses the first. Another line extends from the cross perpendicular to the

arm-like extension. It, too, is topped with a crossing line; this one seems to slant downwards at the ends in a wide arrow-like fashion. On the right there are a number of projections. The lowest stick leg projects out and slightly up at an angle and ends in a 'v'-shape. Just above this is a very faint short straight line projecting out at the same angle. A third, more deeply carved, line extends out at the same angle again slightly above the faint line. This third line seems to bend slightly down and continue off the edge of the rock face. A fourth line occurs further up towards the top of the rock face. It projects upwards at an angle and has two downward projections, the lower one slightly longer than the upper projection. The last projection on the right side of the body occurs near the top of the rock face. It resembles a turtle's tail and is triangular in shape. The face of the zoomorph appears below a straight line dividing the semi-round head from the body portion. Another straighter 'mouth' line appears below the dividing line. Two round cupules are in place as 'eyes'. The face resembles a classic happy face with a straight line instead of a curved one for the mouth. There are a large number of cupules on the southernmost face of the rock. Faint lines other than those described also occur on the rock face to the left of the 'turtle' zoomorph. These appear to be, in part, an extension of the 'hand' described previously.

In general, the rock face seems to be intact with very little damage. One exfoliation occurs near the top of the rock face on the extremity of the body's interior. Again, because the rock is on private land, little opportunity for vandalism exists. The boulder is fiercely protected by the landowners and as such remains in an almost pristine state. Its placement is such that it is somewhat protected from further weathering in the shade of the shed.

The Gouldtown Petroglyph is included in Buchner and Steinbring's 1998 report. They obviously only observed the boulder and did not carry out any excavations as it is no longer in its original location. They do state that the petroglyph is tilted more forward than its original orientation as the lichen lines did not appear to be perpendicular with the current ground surface. Buchner and Steinbring (1998: p. 66) also note that this boulder would be an "ideal candidate for use as an interpretive vehicle in a museum". They state at that time the owner

would agree if security measures were in effect. A picture of the Gouldtown Petroglyph is included in Zenon Pohorecky's book *Saskatchewan Indian Heritage* (1970). In the caption, he states the boulder was recorded in 1959 and originally sat on top of a hill near Gouldtown with the zoomorph's head pointed towards a large ceremonial center 4.8 km (3 miles) away. The ceremonial center was a 22.5 m (75 foot) stone circle on the top of the highest butte in the area. The terrace below the petroglyph had 2 smaller stone circles.

For the present research the boulder was measured and extensively photographed. As Buchner and Steinbring (1998) observed, the rockface was difficult to photograph effectively. Once again, water was poured over the rock face in order to provide contrast for photography. This was effective as seen in the resultant photographs, particularly because the rock itself is dark in color. Sketches were also done for use in later, more detailed drawings. No photographs or drawings were included in Buchner and Steinbring's 1998 report, nor could any other drawings or quality published photographs be found. Because of this it is difficult to assess the state of the petroglyph as compared to previous studies. The boulder was visited once. In talking with the landowner it became clear that he was very protective of the petroglyph and his possession of it. He stated at that time he was in the process of returning the rock to its original position near Gouldtown. It is unknown whether this has taken place.

4.9 Wood River Petroglyph

Illustrations and photographs appear on pages 132-134, Figure A41-A44.

The Wood River Petroglyph is one of several boulders found in Saskatchewan with faces carved on it. It is presently in a shop on the farm of Steve Wilson near Coderre. The limestone boulder was discovered by Steve Wilson in the foundation of his great-grandfather's homestead shack (Carlson 1994). It is believed to have been placed as a cornerstone in 1906 by Charles Wilson. The stone was photographed *in situ* , then carefully removed by Steve Wilson, where he discovered two faces carved on opposite sides of the boulder.

The rock is quite heavy estimated to be at least 100 kg (Carlson 1994). It measures 60 cm in length, 36 cm in width at its widest point, and 23 cm in height. It is carved on the two flat sides. One side (Figure A41) is inscribed with circular eyes with interior circular indentations. Eyebrows are located 5 cm above the eyes and consist of short horizontal lines. The mouth is a rounded rectangle that is more lightly incised. The left side of this face has an ear depiction consisting of a curved line and a dot. The opposite side of the boulder is carved with a similar face (Figure A42). The eyes are two round cupules. The eyebrows are faintly incised and slant down at the outside edges. The mouth is more deeply carved than the opposite side and is more rounded than the other mouth. A short line bisects the generally rectangular mouth. Two lines run along the top of the rock. Muriel Carlson (1994) describes these as "resembling a Walkman headphone". The rock is somewhat head-shaped in that it is wide at the top and narrows to a chin-like point.

There does not appear to be any specific damage to the rock other than general weathering. As the rock is now placed indoors it is even more protected from the elements and certainly from vandals. Unfortunately, the exact original location (prior to its placement in the foundation) is not known. Muriel Carlson (1994) suggests that it was originally located on the bank of the Wood River near its relocated position as it would have been difficult to move and river banks were a common location for petroglyphs of this nature. In any case, it is not possible to describe the original surrounding area, however, it would seem that it was likely not atop a hill with a commanding view.

Very little published information was found regarding this petroglyph boulder other than Muriel Carlson's 1994 article in the *Saskatchewan Archaeological Society Newsletter* which was previously published in *Western People* (Carlson 1994). It was not included in Zenon Pohorecky's 1979 article "Faces Carved on Boulders in Southern Saskachewan", although it certainly could have been.

For this project, the boulder was measured and photographed. Sketches were made in order to create accurate drawings at a later time.

4.10 St. Victor Petroglyphs (DiNl-1)

Illustrations and photographs appear on pages 135-158, Figure A45-A75.

The St. Victor Petroglyphs are located 2.4 km south of the village of St. Victor, Saskatchewan. The petroglyphs are carved into an outcropping of the Ravenscrag Formation sandstone. The site was designated a Historic Park in 1968 (Amundson and Kelly 1987) and is unique because the sandstone surface is horizontal, one of the few on the North American Plains. The large number of petroglyphs in one area makes St. Victor important and relatively unique in Saskatchewan as well.

The rock art found at the St. Victor site is widely varied. At most times it is somewhat difficult to see many of the petroglyphs, due to the depth of the carving and light conditions. Jones noted it is not possible to see all of the petroglyphs at one time (Jones and Jones 1982). The glyphs can be divided into several different categories. In order to describe the often densely carved motifs at St. Victor it is necessary to use the following divisions: footprints, zoomorphic figures, anthropomorphic figures and geometric figures.

FOOTPRINTS: Most of the petroglyphs at the St. Victor site fall under the category of footprints. Hoof prints are the most abundant, numbering no fewer than 123 prints. Different species are also most likely represented (Figure A45). The hoof prints vary in size but most are between 5 cm and 15 cm in width and between 17 cm and 20 cm in length. Many of the hoof prints are u-shaped, possibly indicating horse hoof prints. Some of the prints found at St. Victor are composed of two curved shapes of varying widths that are convex, curving towards each other. Some of these prints include two cupules, perhaps indicating dew claws which in turn may indicate seasonality. A lower number of hoof prints are semi-circular in shape and appear in pairs with the flat sides facing each other.

Human/bear prints are also numerous (Figure A46, Figure A47). A number of the prints of this nature are partially or fully outlined with varying lengths of 'toes'. Some are very long, up to 16 cm, while others are circular in shape. Some of the footprints are fully pecked,

also with varying digit lengths. In many cases, the line between what is conventionally interpreted as bear claws (elongated digits) and human feet/hands is blurred. This in itself is common. There are approximately 51 prints of this nature. These type of prints measure, on average, 14 cm to 30 cm in length and 10 cm to 20 cm in width. The final type of print in this category is more readily identified as handprints (Figure A48), with proportions consistent with human hands. The digits are approximately the same length as the main part of the print and for the most part, these prints are fully pecked. Polydactylic examples and amputations also seem to be present at St. Victor.

The least common type of print is that of birds. There is one print of this type (Figure A49), with 1-2 possible bird tracks. The print measures 17 cm in length and approximately 13 cm across at its widest point. The readily identifiable bird print consists of a long central line with shorter lines extending off each side at an angle.

It is interesting to note that some of the footprints appear to lead to the edge of the cliff where the petroglyphs are located.

ZOOMORPHIC FIGURES: There are a variety of possible zoomorphic figures evident at St. Victor. These classifications are speculative and a "best guess" in most cases. There are two depictions of turtles; one is in outline (Figure A50) and the other is fully pecked. The pecked example is only partially depicted, however, the forms are in close proximity and are similar in form. Near where the boardwalk used to stand is what is most likely a partially executed zoomorph (zoomorph #1). It is depicted in outline and includes a rounded body in outline, at least two legs, and what may be a "heart line" in the interior of the body (Figure A51). Slightly further to the northwest is a similar motif (Figure A52) consisting of a rounded outline with four 'appendages' extending from one side (zoomorph #2). A complex composite motif appears in an area that is densely populated with petroglyphs. The more southerly portion of this petroglyph may be a zoomorphic figure with an outlined body-like shape and two star-like projections at either end (Figure A58). As well, two short lines extend towards the northeast.

the rock face, however, they are quite faint and it is difficult to describe them with any accuracy.

There is little or no vandalism apparent with this petroglyph. This is certainly due to the isolated and heretofore unknown location. It is curious that this rock was not found prior to Dr Laing's discovery. Its positioning propped against another rock in the small cairn also seems somewhat questionable. Lichen growth is abundant on the back side of the rock, however little lichen growth appears on the rock face where the carvings are found. There is a band of black lichen growth along the bottom of the rock face that seems roughly parallel with the present ground surface, indicating that the rock has been in its present location for some time. No previous research has been conducted on this petroglyph, nor have any excavations been undertaken at this location. There are a number of other significant archaeological sites in the vicinity including the Cabri Lake Petroglyph, a number of stone cairns, two boulder effigies, stone circles, and lines of stones indicating that the region is rich in this type of evidence.

The present research included photography and drawing as well as measurements of the boulder. Wetting the rock face was attempted but did not seem to enhance the visibility of the carving in photographs or otherwise. As previously noted, shading the rock face seemed to clarify the motifs somewhat, however, the nature of the glyphs made it difficult to record and draw accurately.

4.5 Hazlet Site (EcOe-1)

Illustrations and photographs appear on pages 111-118, Figure A11-A21.

The Hazlet or "Standing Rock" site (EcOe-1) is located 6.2 km west of the town of Hazlet. This pictograph site "was entered in to the provincial inventory by Mrs. Ruth Heron of Cabri in 1988" (Buchner and Steinbring 1998). The rock itself is a very large glacial erratic which apparently was an important landmark for early settlers of the region (Figure A21). It is

ANTHROPOMORPHS: At St. Victor, anthropomorphs are, for the most part, more easily identified as specific depictions. There are two, possibly three depictions of heads. A lightly pecked round head can be seen near the northeastern edge of the horizontal petroglyphs. The top of the outlined head is slightly pointed and a face is represented by small dots for the eyes and nose and a short straight line for a mouth (Figure A53). Another head is depicted in outline. The head is rounded and at the lower edge appears to extend into a short square neck (Figure A54). The face is indicated with two rounded indentations for eyes, a vertical line for a nose, and a rounded square in outline for a mouth. The mouth has several teeth indicated. Two short lines project from the top of the head appearing as hair or possibly adornment such as feathers. To the northeast, another possible head appears. It, too, is depicted in outline, however, no face is indicated. Ear-like square projections extend from the rounded outline and what could be shoulders are incised below the head. A much smaller possible head-like form appears in a large group of glyphs near the edge of the rock surface. This 'face' is vaguely shaped in a conventional light bulb shape with a rounded portion narrowing to a squared bottom (Figure A55). Two 'eyes' are indicated with small round dots and six lines extend from the rounded portion of the outline appearing hair-like.

Another anthropomorph appears near one of the possible zoomorphic figures. The figure is executed in outline and consists of two parallel lines depicting the sides of the body and extended to represent legs (Figure A56). The line on the right is not quite continuous, but appears with slight breaks. The legs end in two short lines pointing to the right indicating feet. A broken horizontal line indicates the bottom of the body and a short horizontal line represents the shoulders. From this line two angled lines extend to represent arms and a round head extends from a short line depicting the neck. In the figure's left 'hand' is a rounded shape, possibly indicating a drum or hoop-like object. The feet are extremely faint and the entire figure is difficult to see, however, using Amundson and Kelly's (1987) map it is possible to locate the figure.

Another possibly more modern depiction can be seen to the south of the previous anthropomorph. This figure appears to be wearing a full skirt that is depicted as a rounded triangle (Figure A57). Two shoes with what appears to be heeled shoes point to the left. A small rounded body is depicted above the triangular lower body. A larger rounded head with short projections on each side appears adjoining the torso via a short line. A straight line projects from the shoulder area on the left. Below the end of the arm and beside the 'skirt' is a small upturned horseshoe shape.

As a part of the previously described complex composite motif is what could be interpreted as an anthropomorph. A round shape appears above two broken parallel lines that have a v-shaped horizontal line indicated near the termini (Figure A58). While it is uncertain, this could be a head with a body below it, much in the style of a v-necked figure or a rectangular bodied figure.

GEOMETRIC FIGURES: The geometric figures at St. Victor also vary in complexity and form. In some cases, motifs in this category are placed in it because they are not clearly part of any other category described previously.

A series of 4 small cupules can be seen near a large concentration of glyphs. Two larger, more oval, cupules occur in amongst a number of footprints and hoof prints. Various other cupules appear elsewhere. Other geometric glyphs include a small group of rounded square outline shapes which are somewhat graded in size and stacked in 'snowman' style (geometric figure #1) (Figure A59). The largest of the shapes is almost teardrop-shaped in outline. Also in this group is a shape in outline that is round, however, one side projects into a point. At the opposite end are two straight projections (geometric figure #2) (Figure A60).

There are two similar geometric shapes in relatively close proximity (geometric figures #3 and #4) (Figure A61). The first is a group of two triangles joined together at the point. The second is also two triangles joined at the points, however, the bases of these triangles are concave instead of straight across. Two parallel short lines appear below one of these concave

bases and at the other end a circle in outline touches the upper triangle. Various other lines and dots appear in other locations, however, some or all of these could be part of hoof print depictions.

The petroglyph site is located on a steep cliff which overlooks a valley. From the site it is possible to see a vast distance. As well, a nearby lake, Lake Montague, is clearly visible, as is the majority of the surrounding countryside. Tim and Louise Jones undertook a comprehensive description and condition report completed in 1982 which is unpublished. Millenium Consultants conducted a stereophotographic and mapping project completed in 1987. Since then no major archaeological studies have been conducted, however, the site is mentioned in other sources such as the publication by Keyser and Klassen, 2001. It has been reported by local residents that as late as 1870 it was used as a bison procurement site, but no archaeological studies have been done to prove or disprove this theory (Jones 1982 in Amundson and Kelly 1987). Tipi rings were once located on the hogsback ridges to the east and west of the petroglyph site, however, these were obliterated by agricultural cultivation (Jones and Jones 1982). At a location 6km west of the site, a surface find including a Besant projectile point and other worked stone including a possible Iniskim have been reported (Jones and Jones 1982). Tim and Louise Jones (1982) also report finding obsidian flakes and flakes of Knife River Flint near the 'turn in road; it is unclear exactly where they are referring to. Until 2001, the site was accessible to the public via a wooden stair/walkway and boardwalk overlooking the rock carvings. As well, the site was accessible by car on a roadway which led to the top of the hill, where a short walk downhill ended in the boardwalk and petroglyph site.

As early as 1999 the walkway/boardwalk was damaged, most likely by vandals, and in 2001 a rock fall precipitated closure of the park to the public and the dismantling of the boardwalk. The carvings continue to weather and erode and the additional danger of another rock fall makes the site important for conservation and education.

For the purposes of this study the St. Victor Petroglyphs were visited on numerous occasions over a period of three years. Photographs were taken on all visits, and a number of measurements and drawings were completed. Attempts were made to visit the site during different times of the year in order to get optimum lighting for photography. Because of the horizontal orientation of the rockface, water was not used in order to enhance visibility. Attempts were made to create impressions by pressing aluminum foil into the carvings, however, because of the shallow depth of the incising, this was unsuccessful.

4.11 Last Mountain Lake Petroglyph [Old George's Museum]

Illustrations and photographs appear on pages 159-162, Figure A76-A80.

According to W.J. Orchard (1942), two faces carved on separate boulders were found on high hills east of the Last Mountain Lake. He includes several photographs of faces carved on boulders including the Last Mountain Lake boulders and one found near Riverhurst, Saskatchewan. For the purposes of this research the specimens could not be visisted, therefore drawings have been reproduced from photographs included in Orchard's (1942) article. The Riverhurst boulder (Figure A76) can be described as a face depicted in outline, with a rounded rectangular mouth. Eyes are represented by incised circles and a nose and eyebrow structure is indicated with a long, straight vertical line flanked by two shorter curving lines. Interestingly, the top of the head is capped off by a small triangle. The Swanston boulder (Figure A77) was one of two boulders found on hilltops overlooking the Last Mountain Lake. This boulder is presently in the possession of a local resident (McDougall 1992) and also bears a face, with a rounded rectangular mouth. There are a number of short straight projections on the bottom edge of the mouth. The nose and eyebrows are similar in form to the Riverhurst boulder, however there are a number of down-curving lines in place of the eyebrows. The eyes consist of dots encircled by larger circles. They too possess a number of short straight protrusions extending from the bottom of the eyes. The original location of the boulder was probably atop a hill called "Old Baldy" by local residents (McDougall 1992). Based

on photographs taken by the original owner, the boulder was most likely removed prior to 1904-1910 (McDougall 1992).

One of the Last Mountain Lake boulders can now be found in Old George's Museum in Whitewood, Saskatchewan. Old George's Museum is located just north of highway #1. It is characterized by George Chopping as a 'living museum'; filled with items collected over what must be many years. The petroglyph itself is housed in a display case behind glass and in amongst a variety of artifacts.

Attempts at measurement were made, however, accurate measurements were impossible. Frank McDougall (1992) reports that based on a cast in the Royal Saskatchewan Museum, the boulder measures approximately 50 cm in diameter and is 15 cm thick. The rock appears to be limestone. As mentioned previously, the boulder is inscribed with a face (Figure A78). The eyes are cupules enclosed in circles. At least two straight lines extend below the eyes. The nose is indicated by a straight vertical line between the eyes. There are two dots on either side of the straight line perhaps indicating nostrils. The mouth and chin are indicated by a short horizontal line with a curved rectangle for the chin and the mouth line appearing above the chin line. Curved eyebrows appear above the eyes.

It is difficult to determine whether the petroglyph has sustained any damage. It appears to be in relatively the same condition at present as it was in Orchard's 1942 photograph. Because of the placement of the petroglyph behind glass and under the watchful eye of George Chopping its future is quite safe from vandalism. It is unclear as to how George Chopping acquired the rock however, he indicated that it came from 'someone's' rose garden in Regina, Saskatchewan. It is unknown where the boulder was in the interim or exactly when George Chopping obtained it.

Little published information exists for this petroglyph. At best, several pictures were located and the general original location was given by Orchard (1942). As the exact original location is not known no excavations have taken place. It is apparent that the original location was on a hillside presumably with a view of the surrounding area. McDougall (1992)

reports that the original location was directly in the way of the surveyed road right of way and the hill is now significantly altered. The boulder was most likely originally removed by J.S. Perry during the same time period as the Swanston boulder (McDougall 1992). This petroglyph was donated to the Royal Saskatchewan Museum where a cast was made prior to its return to J.S. Perry in 1928 (McDougall 1992).

The petroglyph was visited on one occasion. The Native American displays are located in the basement of the house or museum. The basement displays are very difficult to see and even more difficult to photograph effectively as the lighting conditions are very dark. This makes the petroglyph even more difficult to observe. George Chopping was asked if the boulder could be removed from behind glass but he refused. Several photographs were taken, however, with the petroglyph in the display it was difficult to take photographs from more than one angle.

4.12 Weyburn Petroglyph

Illustrations and photographs appear on pages 163-164, Figure A81-A82.

The graphic image of the Weyburn Petroglyph is one that is well known to archaeologists in Saskatchewan. At one time it served as the symbol on the Saskatchewan Archaeological Society's newsletter and has been published in a number of publications. The monolith is presently situated in the Royal Saskatchewan Museum in Regina. According to Robert Nero, in a 1958 Bluejay article (Pohorecky 1979), it was originally found on a hilltop near Weyburn in June 1935 by Victor Mulhall. At that time it was described as a limestone boulder with a face carved in the side, weighing c. 182 kg (400 lbs). Later, Mrs. Isabelle Eaglesham of Weyburn wrote a letter to the museum including location sketches indicating that the boulder was originally found just south of town on the Souris River (Pohorecky 1979). No formal excavations have taken place, although historically, it has been recounted that several boys both dug around the boulder and sifted through back dirt and discovered an arrowhead and two beads made of stone or ivory, however, this is unsubstantiated (Pohorecky 1979).

Selwyn Dewdney included this petroglyph in a 1963 pictograph project in which it was numbered "Glyphstone #183" (Pohorecky 1979) and along with a description, noted the affinity between this image and some of those found at St. Victor.

The rock face bearing the carving measures 32cm by 23cm and the rock itself stands 36cm tall. The carving is rather shallow (noted also by Pohorecky 1979) and is a depiction of a head with many details in evidence (Figure A81). Notably, the neck is elongated and bears a number of horizontal bands. The face is fully depicted including round cupule eyes, short eyebrows, a circle for a mouth, and a nose consisting of a vertical line with two small cupules at the base. Projections extend below the eyes; these can be included in the "weeping eye" category. Several dots or cupules also appear on the face, two on the forehead and a number on the chin. Ears are most likely indicated as half circles on either side of the head. Projections extend from the bottom of both the ears, connecting with or overlapping projections originating at the neck. Two short lines project to the left of the rock face from the ear on the right side, and a number of lines, of varying lengths, extend from around the top of the head.

Original reports place the boulder atop a hillside, presumably with a view of the surrounding area. The boulder is presently in the Royal Saskatchewan Museum, and as such, is protected from both weathering and vandalism. It should be noted that the lines carved into the boulder have at some point been enhanced with red paint or dye, making the carving easier to see but potentially damaging the petroglyph. Because of its early recovery and placement in the museum, no archaeological excavations or surveys have been conducted with this petroglyph in mind. Little published information exists on this monolith, most likely because of its early displacement. For this project, the petroglyph was photographed and drawn, with the permission of museum officials. Photography was somewhat difficult as the somewhat dark and artificial lighting produced dark photographs.

4.13 Roche Percée (DgMq(-2;-40;-11;-5))

Illustrations and photographs appear on pages 165-168, Figure A83-A88.

The rock form known as Roche Percée is located near the town of Roche Percée and south of Bienfait, Saskatchewan in the southeastern part of Saskatchewan. Bienfait is about 11 km east of Estevan, Saskatchewan. The rock formation is a provincial historic site and is clearly marked on maps as well as some signage and a 'Celebrate Saskatchewan' monument. The rock formation is well known in the vicinity.

The rock itself is part of the Ravenscrag geological formation which has been eroded into its present shape by wind and water. The unique result of this erosion must have stood as a sacred place in the past. The name 'La Roche Percée' comes from a particular place where a hole formed in the rock 'piercing' it. This arch has since collapsed, however, the rock is still pierced in several places. Unique rock formations aside from the main section exist in the immediate vicinity. The surrounding area has significantly changed since precontact times. Evidence of development and mining are visible. It can be assumed, however, that the Roche Percée formation was visible from quite a distance, and could easily have served as a landmark in previous times. The rock itself is a soft sandstone which could have been easily carved with any number of implements including fingernails.

Reports on this site are rare, however, W.J. Wintemberg (1939) visited the site in 1925 and has described the petroglyphs on the basis of his visit and based on an earlier reports by Sir James Hector who visited in 1857 and Dr J.W. Dawson who visited about 1879. It is on Wintemberg's report that much of the following information is based as very little of the rock art is still in existence. Unfortunately, vandalism has had a huge impact on the survival of the glyphs. As such, not much remains in the way of rock art. By the time Wintemberg visited Roche Percée the archway had collapsed and many of the glyphs described by Dawson had been eroded or destroyed by vandals. The petroglyphs at Roche Percée are unique in that many of them are composed of outlines made up of drilled holes. This does not appear to be a

common method by which rock art has been executed of the Plains or elsewhere. Some of the motifs have been incised into the sandstone surface.

Wintemberg (1939) divided his descriptions into the following; indeterminate forms, stars, tree-like, tipi-like, fish, hare, deer or antelope, wapiti, bison heads, horses and human forms. His descriptions will be discussed and then observations from the present research will be discussed in comparison.

Indeterminate forms at Roche Percée could also be described as geometric. A zigzag made up of drilled holes was observed. As well, Wintemberg (1939) reported a "few" circles composed of holes with a hole at the center as well as half round shapes. The exact location and number is not divulged so it is difficult to know where to look for the aforementioned shapes.

An incised star with five points is described as "un-Indian" (Wintemberg 1939). Tipi shapes were also incised into the rock surface. These consisted of 2 groups of 3 straight lines that join at the top giving the impression of tripod forms. In a cave near Roche Percée a tree-like form was observed. No illustration is provided so no other interpretations can be made at this time.

One fish, described as being upside-down, was reported. It is not known where this motif was located. Lines extending from the bottom of the body led to the interpretation of the orientation of the fish, however, similar diagonal lines also appear inside the body. A lizard form was also reported and was also observed in the cave. The lizard and the fish appear to be incised although this is not explicitly stated.

Several bird forms were also described by Wintemberg (1939). Four were executed with outlines composed of drilled holes and three were incised. Wintemberg (1939) also proposes that some other forms may represent birds or may be human beings. Some bird forms were headless but most had downward curving wings and "shield-like bodies" (Wintemburg 1939).

One pitted outline of a hare or rabbit was reported by Wintemberg on a rock near Pinto, Saskatchewan. Three figures were described as deer, antelope and/or wapiti, however, Wintemberg (1939) also states the species were difficult to identify. Thirteen bison heads were described all showing the head from the front viewed from straight on. Five were from Roche Percée and one on another rock on the north side of the Souris River, three heads were on the rock near Pinto (Wintemberg 1939). Some had eyes and ears represented, in most cases with extra pits, but one of the thirteen heads was incised. It is not indicated where this head was observed.

Three horses were found in the back of the cave, both composed both of pits and incisions, and a combination of both. From the illustrations provided, it is clear that they are quadrupeds and at least one does appear to be a horse. This is significant in terms of dating the petroglyphs in the cave, although obviously it is not indicative of dates elsewhere, such as at Roche Percée itself.

Eight human forms were reported, two at Roche Percée, two on a rock east of Roche Percée, two in the cave, and two on the rock near Pinto (Wintemberg 1939). Apparently some were pitted and some were incised. Most of the human forms were headless. Wimtemberg discussed the problems in determining whether inscriptions done by vandals could have been originally part of human representations or whether they were added afterwards. Examples of this are an 'o' in a name appearing as a head or pits that appear to be "mammaries" (Wintemburg 1939) that may have been added by vandals.

Two factors make it difficult to locate petroglyphs on the rock surface at Roche Percée or on rocks associated with it. The first is that petroglyphs described by Wintemberg (1939) are not listed with specific locations. Not all of the petroglyphs in Wintemberg's (1939) article were directly observed by Wintemberg himself, causing the locations to be even more vague. The second obstacle is that vandalism and erosion have all but obliterated much of the petroglyphs. As a result, it is hard to find any petroglyphs at this site.

Despite these difficulties, some petroglyphs were found during the present research. Many drilled holes were seen on the rock surface. It is unknown whether these are prehistoric or made by more modern day vandals. On the north face of Roche Percée, two circles composed of drilled holes and one hole in the center were recorded (Figure A83). The formation on the left is much more deeply drilled than that on the right hand side. To the right and lower on the rock face closer to the ground, a bird outlined with pits was located (Figure A84). An inverted triangle body is clearly delineated in small pits. The 'shoulder' line extends on either side and in both cases turns downward at the terminus of the line. A left facing head extends above the shoulder line, also executed in dots. This form is reported in Wintemberg's 1939 article. Other drilled holes appear near these three forms, but it is unclear whether they are a petroglyph as such.

Many other clusters of dots appear on the rock face at Roche Percée. Close comparisons with the illustrations and descriptions in Wintemberg's article (1939) were made, but no other matches were identified.

The rocks in the immediate surrounding area were also studied. No petroglyphs were found, either because they are no longer in existence or because the rocks were not the ones reported by Wintemberg. As mentioned previously, vandalism had been and most likely will continue to be a major problem at Roche Percée. The nature of the sandstone surface is such that inscription into the rock, both incising and 'drilling' holes is exceedingly easy. The number of initials and the like far outnumber observable petroglyphs. Continuing erosion at the site also affects the rock surface and any remaining petroglyphs. The site is in no way protected from the public. Unfortunately, the presence of vandalism, and probably of petroglyphs, at one point, encourages later visitors to leave their own mark. At this point, it seems clear that the site may be beyond help and/or hope.

No excavations have been done at this site to this researcher's knowledge. Published information is scarce. Roche Percée is mentioned in several general descriptions but in depth description and research is absent. For the present research, the site was visited and

measured. Photographic records were taken and drawings were made onsite. It is difficult to note any changes to the site as Wintemberg (1939) did not include extensive photographic evidence to compare with the site as it is at present.

CHAPTER FIVE: COMPARISON AND DISCUSSION

5.1 Comparison and Discussion

There are many avenues by which these rock art sites can be analyzed, ranging from generalized to specific. This collection of disparate motifs are arbitrarily grouped together in a way that would not have been relevant at the time they were made and/or utilized. The following comparisons are an attempt to link the monuments in Saskatchewan as described in this thesis to sites elsewhere. This can help to situate the variety of modes of expression within the greater rock art world, as well as help to situate these rock art sites in time and meaning in addition to possibly associating them with particular groups of people. The following discussion is not exhaustive of all of the possible connections and interpretations, but a selection of the most relevant.

5.2 Keyser and Klassen Classification Scheme

The overarching interpretation is that all but one of the sites in southern Saskatchewan belong in Keyser and Klassen's (2001) Hoofprint Tradition. This tradition was described earlier in this thesis, however, it will now be discussed specifically in relation to Saskatchewan sites.

The Hoofprint Tradition extends to Saskatchewan and Alberta in the north and from the Black Hills to the Rocky Mountains, with the bulk of the sites south of the Missouri River. In their description of this tradition Keyser and Klassen include the motifs found at all of the sites in Saskatchewan including hoofprints, bison heads, human faces (including the "Weeping Eye" motif) on glyphstones, ribstones and other geometric designs. Clearly, St. Victor is the most obvious member of the Hoofprint Tradition. The large number of hoofprints, as well as human hand and footprints, bear and bird tracks found at St. Victor make it an important site within the tradition. Often, prints are quite realistic, as they are at St. Victor. Indeed, Keyser and

Klassen (2001) note that bear tracks found at St. Victor are more realistic than some of those found at other sites. A bird track is also present at St. Victor.

Animals in other forms are also found in the Hoofprint Tradition and in southern Saskatchewan. Turtles can be found at St. Victor and possibly on the Gouldtown petroglyph. At one time, a frontal depiction of a bison head was present at Roche Percée, however, it has since been destroyed. There are also animal depictions on the Swift Current petroglyph. Keyser and Klassen (2001) also include ribstones, such as the monolith at Herschel in the Hoofprint Tradition. The ribstone called the Sleeping Buffalo, found near Malta, Montana, is also considered to be in the Hoofprint Tradition. It is directly in association with other hoofprint boulders, supporting the assumption that ribstones should be included in the Hoofprint Tradition (Keyser and Klassen 2001).

Human depictions other than hand and footprints are another key element in the Hoofprint Tradition. A number of human heads are found at St. Victor, notably one with a banded neck motif. Keyser and Klassen also include the Weyburn petroglyph depiction and numerous other faces depicted on boulders, including the boulder at Old George's museum, the Wood River face and several boulders reported by Zenon Pohorecky in 1979 that are no longer in existence. There is also at least one fully depicted human figure at St. Victor.

Geometric designs are also found within the Hoofprint Tradition. The inclusion of motifs such as circles or ovals, bisected ovals, dots, pits and grooves clearly indicate that the Swift Current boulder, Cabri Lake petroglyph, likely the Leader petroglyph, and all three monoliths at Herschel should be included in the tradition as well.

With direct motif and subject links, other inferences can be made about Southern Saskatchewan rock art sites because of the relationship to the Hoofprint Tradition on the Northern Plains. Keyser and Klassen (2001) make conclusions about the chronological range of this tradition. The dateable evidence is scant, however, the presence of a corner notched projectile point at Snake Butte, Montana, indicates a possible date of 1000 BC to AD 1700 (Keyser and Klassen 2001). Buchner and Steinbring found Late Prehistoric artifacts in deposits

surrounding the cupule petroglyph at Herschel (1998). The association of the tradition with the Devil's Lake Sourisford complex, to be discussed in more detail in a subsequent section, signals a possible date of between AD 900 and 1400 (Syms 1979: Jones and Jones 1987; Keyser and Klassen 2001). All of this evidence leads to a Late Prehistoric age for rock art sites in Saskatchewan and others in the Hoofprint Tradition. There is also evidence that the Hoofprint Tradition survived into the Protohistoric Period. The presence of horse tracks in petroglyph form, including a number at St. Victor, suggest that at least in some areas the tradition stretched somewhat beyond AD 1700 (Keyser and Klassen 2001), most likely into the AD 1800s.

Keyser and Klassen (2001) also postulate that cultural affiliations are possible and quite straightforward. The known range of Siouan language speakers seems to correlate directly with the distribution of the Hoofprint rock art tradition. Keyser and Klassen (2001) also note that there is ethnohistoric evidence from Siouan groups indicating they used rock art sites as a locale for religious activity and that they followed a mythology involving the themes of fertility, bison and women (Keyser and Klassen 2001). Keyser and Klassen's final argument for this association is that the dates for the Hoofprint Tradition correspond with the spread of Siouan speakers into the Plains region (Keyser and Klassen 2001). They allow that there is the possibility of affiliation between rock art sites and Algonkian-speakers including Plains Crees and Cheyenne, particularly with the glyphstones. In the Northwestern Plains, these groups have been known to use the sites as places of offering, however, it is unknown how far back this usage and relationship reaches. Aligning the sites included in the Hoofprint Tradition with particular populations is not possible throughout the entire region, however, possibilities include: " the Mandan, Hidatsa, Crow, Assiniboin, the Dakota and Lakota Sioux and perhaps even the Ponca" (Keyser and Klassen 2001).

Keyser and Klassen (2001) have presented a theory of interpretation for the Hoofprint Tradition. This theory has also been postulated in some form by other researchers, including Buchner and Steinbring (1998), Sundstrom (1993) and probably others. Keyser and Klassen's

interpretation involves cosmological beliefs regarding women and bison as producers and sustainers of life. Sundstrom discusses this belief system in relation to her study in South Dakota (as summed up by Keyser and Klassen):

> She notes that this association was fundamental to the belief systems of several Siouan-speaking Plains groups and was thus reflected in their art, religion, status system, color symbolism, names and other aspects of their bison-hunting societies. Themes of fertility, fecundity and the sacred relationship between womanhood and the bison recur throughout the Siouan belief systems.
>
> (Keyser and Klassen 2001)

Depictions of both bison and women, as well as copulation and birth at a few sites, reflect these beliefs. Also included in this belief system are the thunderbird and turtle, major deities for Siouan speakers. They ruled the realms of the sky and earth. The turtle represented "protection, longevity and the forces of the subterranean realm" (Keyser and Klassen 2001) and the powerful thunderbird ruled the sky and events such as lightning storms. Both deities are found in southern Saskatchewan. The turtle is found at St. Victor and possibly on the Gouldtown petroglyph. Thunderbird motifs have been noted at St. Victor and Roche Percée. Bird footprints, sometimes referred to as Thunderbird tracks, have been found at St. Victor also, and may have been carved to appease the powerful Thunderbird deity (Keyser and Klassen 2001).

Naturally, bison hunting is also associated with rock art belonging in the Hoofprint Tradition. The connection between the hoofprints on the cliff edge and possible use as a bison jump at St. Victor is an important indicator of this interpretation. Jones and Jones (1982) suggest hoofprints pointed towards the edge of the cliff were carved in association with the rites of shamans performed to control bison and get them to jump over the cliff (Jones and Jones 1982, Keyser and Klassen 2001). This could also represent a ritualized bison jump since no bone bed has been recovered. Ethnohistorically, evidence suggests rock art sites were places of supernatural power, places revered and where offerings were, and still are, often left.

Keyser and Klassen (2001) consider these two theories complementary and believe they fit well into what was most likely the cosmology of the people who made the carvings. They also emphasize that the extreme importance of bison to precontact cultures serves as a motivation for their lives, therefore attempts to control and ensure reproductive success of bison through depictions of hunting magic and fertility just make sense.

One southern Saskatchewan site seems not to fit into Keyser and Klassen's Hoofprint Tradition. The pictographs found at Hazlet are not typical of the motifs usually associated with that tradition. The rock art at Hazlet is more clearly related to Keyser and Klassen's Foothills Abstract Tradition. Within this tradition, handprints are a common motif. Red ochre washes covering expanses of rock walls are also prevalent, either alone or in conjunction with handprints. The handprints are either actual prints or, as is most likely the case at Hazlet, simulated prints. The pigment smeared or painted walls are deliberately applied and can also be spattered in appearance. The wall of the Hazlet rock is covered with an ochre wash, another key in linking this site with the Foothills tradition. The Split Rock site in southern Alberta consists of a large broken glacial erratic with a passage between the two broken halves. The walls of this passage are covered with red ochre wash. This formation is strikingly similar to the Hazlet site, which is also a split glacial erratic with red ochre wash (and also handprints) on the wall between two broken pieces. This similarity and commonality of motifs leads to the conclusion that although Keyser and Klassen (2001) overlooked this southern Saskatchewan site, it should be considered a part of the greater Foothills Tradition described by Keyser and Klassen.

As such, a slightly different set of interpretations can be made regarding the Hazlet site. Chronologically, the Foothills Tradition is presumed to span the Late Archaic into the Late Prehistoric periods, however, some evidence suggests it is older. The tradition has primarily been dated through relative means (Keyser and Klassen 2001). The inclusion of Hazlet in this tradition would extend the range slightly, which at present includes sites in Montana and Alberta. Notably, the motifs found at Hazlet appear to follow closely the description of Foothills

rock art and does not show any combination or relationship between Foothills and Hoofprint motifs.

Culturally, the Foothills Tradition has been associated with a number of groups, however, the presumed age of the tradition prevents links with known ethnohistorical groups (Keyser and Klassen 2001). The Pelican Lake archaeological complex has been associated with the tradition by Keyser and Klassen (2001). The majority of the sites are found within the original homeland of the Kiowa and route of migration of other Athapaskan speaking groups (Keyser and Klassen 2001). This is a tentative conclusion at best.

The meaning of the rock art in the Foothills tradition is not straightforward. It has been suggested it functioned ceremonially, used by shamans in rituals (Keyser and Klassen 2001). The sites also could be interpreted as markers. The handprints could serve as metaphors representing the contact between shamans and the world of the supernatural. The somewhat difficult access of the Hazlet site could indicate it served as the location for a private, as opposed to public, ritual. Keyser and Klassen (2001) assert these private rituals were "intended to ensure harmony between humans and the spirit world, maintain the natural order of things, create cosmic equilibrium or provide world renewal".

5.3 Connections to the Devil's Lake-Sourisford Burial Complex

The Devil's Lake-Sourisford Burial complex was thoroughly studied and described by Leigh Syms (1979) in an article entitled "The Devil's Lake-Sourisford Burial Complex on the Northeastern Plains" which was published in *Plains Anthropologist*. The complex is characterized primarily by unique miniature vessels, whelk shell gorgets, catlinite pipes as well as distinctive decoration, design and incising on these items. All of these artifacts are considered to be part of the Devil's Lake-Sourisford Burial Complex (DLSBC) because of their distinctive characteristics as well as the geographical location and association with burial mounds.

The most striking similarity between motifs of the Devil's Lake-Sourisford Burial Complex and rock art discussed in this thesis are the "weeping eye" images found in both. In the DLSBC, the "weeping eye" motif is found on whelk shell gorgets. Syms describes these as the "second most conspicuous items" (Syms 1979). They are ovoid in shape and consist of the outer whorl of marine shells found in the South Atlantic and Gulf Coast of North America (Syms 1979). The shells were made into "mask-like gorgets" (Syms 1979) as well as gorgets with eyes and nose indicated or gorgets with little or no incising.

The "weeping eye" motif found on the gorgets and on some southern Saskatchewan rock art bearing boulders is considered to be a Mississippian motif, cultural elements of which are known to have spread into the Northeastern Plains region. Gorgets were important to Mississippian peoples who originally occupied portions of the southeastern United States and have been found in war bundles as late as 1883 (Syms 1979). "Weeping Eye" DLSBC gorgets have been found at the Calf Mountain Mound, Manitoba, and at the Heimdal Mound in North Dakota (Syms 1979). Other motifs, including turtles and snakes, elk, swallows and possibly a bear and horse have also been found on DLSBC gorgets.

The origin of the raw material for the shell gorgets is significant in that it indicates at least a trading relationship in the Mississippian network (Syms 1979). Syms (1979) proposes the likeliest route was "up the Mississippi River and across to the Missouri Villages" This indicates interaction and travel between contemporary but culturally different groups.

Devil's Lake-Sourisford Burial Complex materials are primarily associated with burial activities, but Syms also associates the complex with bison localities. DLSBC sites are located in a region between the Aspen Parkland and Missouri Coteau (Syms 1979) and roughly correspond with the seasonal movements of bison. Syms notes that it is also notable that burial mounds have seasonal limitations as well, surmising that mounds would have been constructed in spring, on the edge of the Aspen Parkland, and in addition were constructed near bison migration localities for that season. More distant sites, such as those found in Saskatchewan, would have been utilized in summer (Syms 1979).

In terms of possible cultural affiliation, Syms hypothesizes that because of the distinctive artifact collection, the DLSBC should be viewed as a regional expression of Mississippian developments. These materials, including those with the Mississippian "weeping eye" motif, fall into the time period ranging from AD 1050-1400 (Syms 1979), with the most significant Mississippian influence developing from AD 900-1300. Historically, DLSBC has been linked with Siouan Oneota groups, and radiocarbon dates indicate that the complex spread over several centuries.

The rock art boulders in Saskatchewan that exhibit the "weeping eye" motif include one of the faces at St. Victor, the boulder now located at Old George's Museum, the Weyburn petroglyph, and the Swanston boulder, and Last Mountain Lake boulder. The presence of this motif could be a further indication of Mississippian influence on the Northeastern plains. It also serves as more evidence for the presence of the DLSBC in Saskatchewan. This also enables us to approximate the date for specimens with this motif, an opportunity that is rare in rock art studies. The DLSBC portable art, similar in design, is dated from AD 900-1300 or 1400, making it reasonable to postulate rock art found in southern Saskatchewan exhibiting these characteristics date from approximately the same period.

Syms (1979) does not speculate on the meaning of the "weeping eye" motif in his article. The lines extending from the eyes could represent, as the name suggests, tears flowing down the face. However, if one disregards conventions of perspective, the lines could represent sight lines, projecting out and forward from the eyes. It could also mimic the markings on the face of the Peregrine falcon. Of course, it is difficult to know for certain what these lines actually represent.

5.4 Associations with the Ribstone Complex

The rock art at Herschel, particularly the largest boulder, monolith #1, has been directly associated with the Ribstone Complex. Fedirchuk and McCullough (1991) described the components of the complex as it pertains to ribstones in Alberta. They indicate that many of

these 'grandfather stones' were originally documented by researchers Marie Wormington and Richard Forbis in 1965. These carvings are usually made on glacial erratics and consist of cupules and grooves or ribs. Fedirchuk and McCullough (1991) also note that many of the stones look like reclining buffalo from a distance. All of the ribstones are linked morphologically. Alberta stones included in this complex are the Scapa, Viking, Trochu, and Endiang Ribstones, as well as the Lizard/Smiling Buffalo, all of which show cupules and grooves. Another important stone in Alberta is the Ironstone. It is the second largest known meteorite in Canada and is considered to be an important Manitou (Fedirchuk and McCullough 1991). The surface of the meteorite has a cupule-like appearance, possibly serving as the inspiration for the pecked cupules in the ribstones.

Because these sites are viewed as places of power, they were locations where ceremonial offerings were made (Fedirchuk and McCullough 1991). There is archaeological evidence for offerings being left in the past, such as beads and stone pipes, and reports of tobacco being left as an offering up until the present day. Fedirchuk and McCullough (1991) propose that the line motifs symbolize the ribs of the bison, and like Keyser and Klassen (2001), suggest the significance of the rock art relates to the importance of buffalo in the culture of the carvers. Fedirchuk and McCullough (1991) also make the assertion that the Ribstone Complex is related to the Sun Dance, and served a ceremonial function, particularly because the ribstones are not generally located near bison jumps, although this relationship is not clear at this point.

The monolith at Herschel clearly belongs in this complex. The presence of both cupules and heavy grooving bear striking resemblance to many of the ribstones in Alberta. During the Southern Saskatchewan Rock Art Project, Steinbring and Buchner (1998) brought E. Breck Parkman, from California, to look at the Herschel monolith. He is considered an expert in the pit and groove morphology found in California, and he determined that the Herschel monolith fit into the morphology of other pit and groove boulders he visited in Saskatchewan and Alberta. He also viewed the Swift Current petroglyph, Hazlet pictograph, found in

Saskatchewan and the Endiang monoliths and Viking ribstones all found in Alberta. Parkman considers both the Swift Current and Herschel monoliths to be pit and groove 'presentation' sites at which offerings were made to appease and/or perpetuate bison herds (Parkman 1998). The Endiang ribstones were both completely covered with grooves and cupules and the two ribstones located near Viking, Alberta are also carved in the same manner. Parkman (1998) asserts these could represent bison, both the by ribs indicated by grooves, and in the shape of the monoliths themselves.

Parkman (1998) concludes that the ribstones he studied in the region represent a continuum with Swift Current being the least related to the Alberta ribstones and Herschel being more related. Morphologically, this is a reasonable hypothesis. He also states that Herschel may represent a midpoint in the continuum, with Herschel being equally related to Swift Current and the other known ribstones. He does not outline specifically how he came to this conclusion, however, so its validity is uncertain. Interestingly, he indicates a slightly separate interpretation for the Alberta ribstones than those found in Saskatchewan. The Saskatchewan ribstones are linked with bison and hunting, whereas he links the Alberta ribstones with vision quests. Parkman believes the Alberta ribstones are also linked with bison in some way, however, not as presentation sites, but as places to acquire power. E. Breck Parkman also suggests that the Saskatchewan and Alberta monoliths are related to pit and groove boulders elsewhere in North America, perhaps not culturally but in terms of motifs. These motifs could be the result of diffusion or migration from the Great Basin and Southwestern Canadian Plateau. This conclusion is speculative at best.

5.5 Rhythmic Carving and Edge Grooving at Herschel

It is interesting to note that other interpretations can be made in relation to the monoliths at Herschel. It has been proposed by both E. Breck Parkman (1998) and Buchner and Steinbring (1998) that the smallest monolith found at Herschel could be the result of the 'edge grooving' principle in which rhythmic grooving is conducted during a ritual act. The

theory was originally proposed by Steinburg and Granzberg in 1986. They suggested that "the act of grooving across a rock edge symbolized change from one state to another. An edge is the end of something and the beginning of something else. The act may have commemorated a rite of passage" (Steinbring 1992). The act itself may have led to an altered state of consciousness through repetitive, rhythmic movements. Steinbring (1992) has asserted that a semi-hypnotic state could certainly be reached through this type of movement. Pits or cupules could also have been formed through a similar yet more percussive movement. Movement was thought to be performed primarily for the transformative motion itself, not particularly for the marks that were left behind. The marks left behind are records of the ritual act. The third and smallest Herschel monolith exhibits edge grooves, perhaps left behind as evidence of ritual edge grooving used to produce an altered state of consciousness.

5.6 Stylistic Links to Glyphstones in Alberta

Another stylistic link can be made between the Cabri Lake petroglyph, Swift Current petroglyph, monolith #2 at Herschel and perhaps the newly discovered Leader petroglyph and a number of monoliths in Alberta. This linkage is purely in similarity of motifs. Photographs of the two petroglyphs from Alberta are included in a publication by the Archaeological Society of Alberta Lethbridge Centre entitled *Story on Stone* (1980). This publication is primarily a photographic record of a variety of rock art found surrounding the city of Lethbridge. Little information aside from measurements and photographs is included, and no other published resources could be found. The first rock, the Stevens Rock was located near a campsite overlooking the Etzikom Coulee in Southern Alberta (Archaeological Society of Alberta Lethbridge Centre 1980). It measures 55cm x 90cm x 38cm. Motifs include circles with connecting lines and circles with dots inside (Figure 22). The second petroglyph was found on a hill at the mouth of Rocky Coulee near the north bend of the Old Man River and is referred to as Quartzite Erratic near Monarch (Archaeological Society of Alberta Lethbridge Centre 1980). It measures 1m x .75m x .5m and it, too is covered with a pattern including circles, grooves,

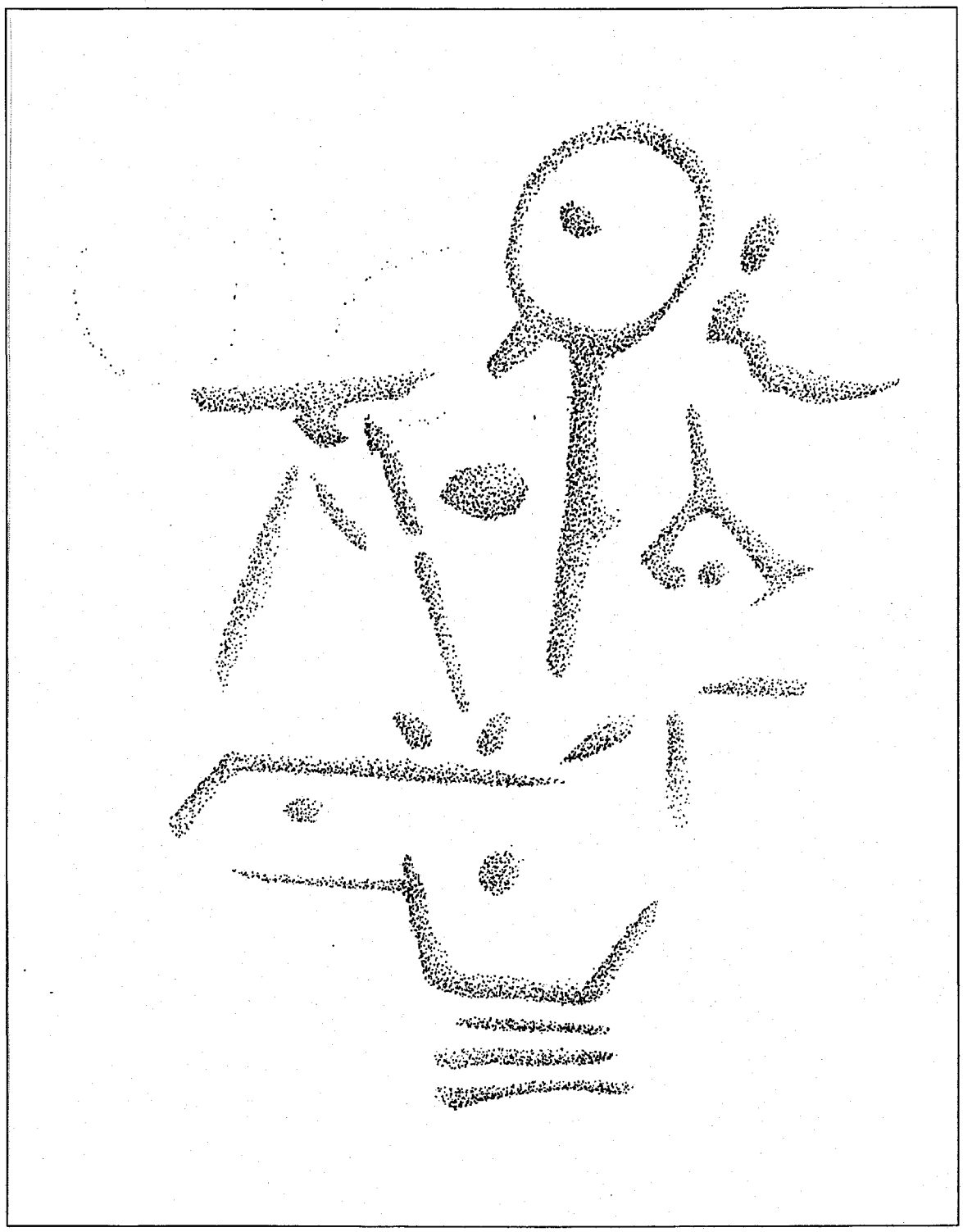


Figure 22 The Stevens Rock, Alberta
(Based on material from Archaeological Society of Alberta Lethbridge Centre 1980)
Drawing by E. Schneider

dots, arcs and crosses (Figure 23). It also includes some human stick figures. This publication suggests the carved monoliths functioned as directional maps with "camps represented by circles, trails and rivers represented by lines" (Archaeological Society of Alberta Lethbridge Centre 1980).

Clear links between these petroglyphs and those in Saskatchewan include the repetitive elements of circles with dots and circles connected with lines. Particular similarities are obvious between the Stevens Rock, Alberta, and the Cabri Lake Petroglyph, Saskatchewan. It is difficult to make conclusions beyond this connection of motifs. It is possible that the rocks functioned as maps of some kind, however, it is not known specifically how these monoliths functioned. It is certain that these petroglyphs are part of the greater Hoofprint Tradition, albeit an as yet undetermined sub-category. They definitely fit within the description of geometric aspects of the tradition. Examples like the Swift Current boulder include and combine elements like circles and representations of animals, perhaps bison, bringing back the overarching theme that is pervasive in both the culture and rock art tradition described by Keyser and Klassen (2001).

5.7 Location

The final aspect of interpretation for rock art sites in southern Saskatchewan concerns the location of the majority of the rock art and the links to the greater cosmology of the artists. While this certainly is included in the discussion of Keyser and Klassen's Hoofprint Tradition (2001), it cannot be overstated. When traveling to the original locations of these rock art sites, it becomes immediately clear that location is not a random factor. Many of the monoliths are found or were originally found on a hilltop (Last Mountain Lake (2), Cabri Lake, Swift Current, Herschel, Weyburn, St. Victor) or are significant anomalies in the surrounding landscape (Roche Percee, St. Victor, Hazlet). The significance of the hilltop placement is noted by Buchner and Steinbring (1998) who state that boulders similar in shape and composition in the nearby valleys are not carved. They also state "Such locations are shared with many other petroglyph

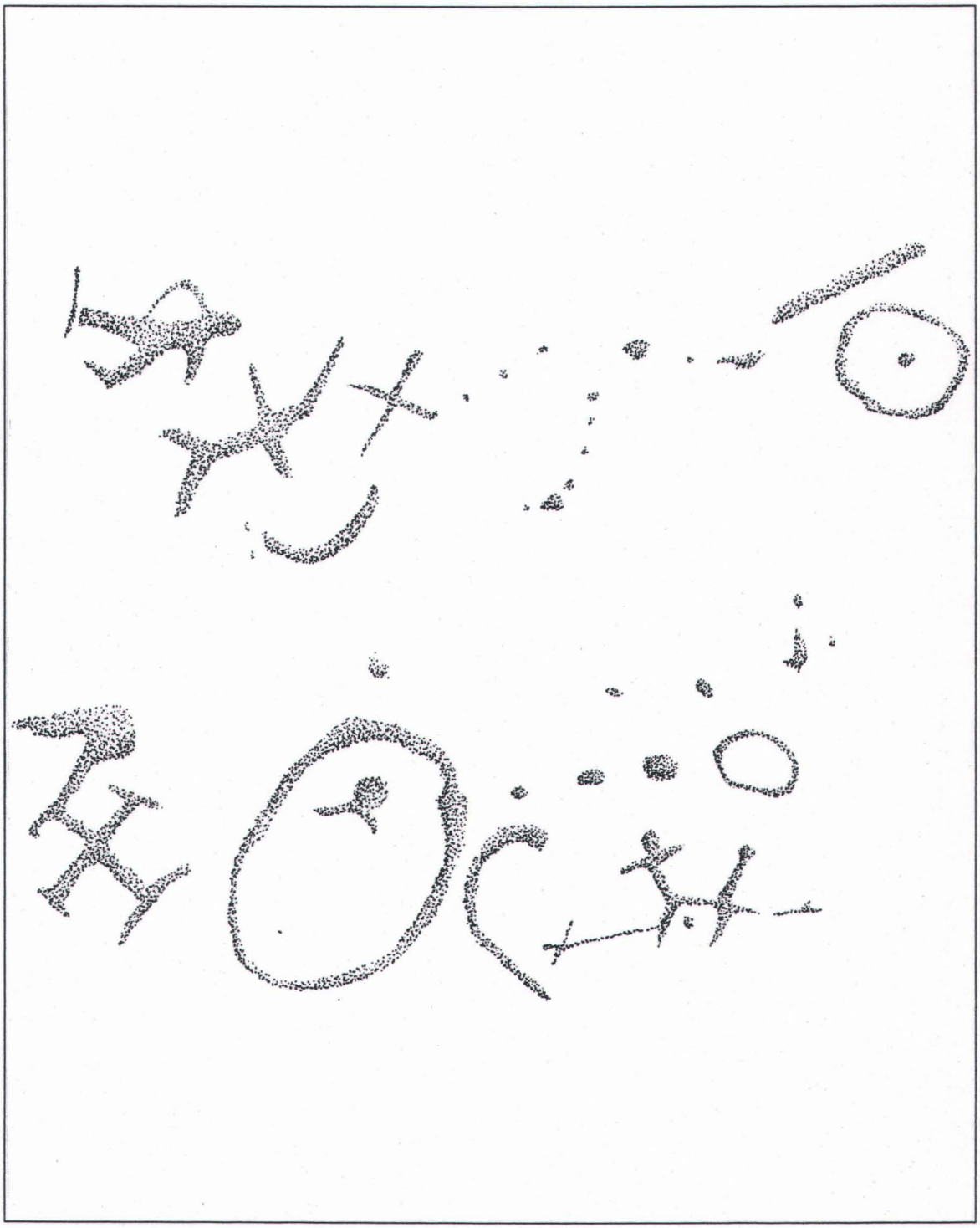


Figure 23 Quartzite Erratic near Monarch, Alberta
(Based on material from Archaeological Society of Alberta Lethbridge Centre 1980)
Drawing by E.Schneider

sites across the Northern Plains and many ceremonial sites worldwide" (Buchner and Steinbring 1998). The rock art on hilltops would most likely have been visible from a fair distance, but perhaps more importantly, views from the hilltop where rock art has been found provide a commanding vista of the surrounding area. Given the topography of the prairies, it is not difficult to see how the ability to see long distances would be advantageous. It should be noted, however, that not all hilltops in the region have evidence of rock art activity. This leads one to believe that the location itself is not the only important factor concerning where rock art is created.

This leads to a discussion of sacred places, places of power and worldview. Worldview can be described as the specific way or ways in which people view their environments, their understanding of their own people and their relationships, their understanding of the animal kingdom and the spirit world. In general terms, worldview consisted of "shared symbolic forms sustained by ritual processes" (Harrod 1987). The worldview of Plains peoples, and all precontact societies in general, includes the everyday world, as well as the dream world, religious experience and the world of legend or myth. It is important to note that unlike modern Western cultures, in which many aspects of life are segregated, Native American religion permeated all aspects of life. Within the precontact belief system, power was a key concept. Power was a transferable commodity, from supernatural beings to individuals or groups of humans. Visions and kinship relationships could also provide transfer of power. As identified earlier, rock art sites could serve as places of power. Deacon (1988) states "(o)ne can draw the analogy then between art and places of worship in other societies where art is not essential to the act of worship but is a valuable adjunct that heightens the mood of the participants and is a permanent display of the importance of the place".

Rituals were an important aspect of Native American culture and a significant amount of time was spent performing them. Rituals were viewed as processes of world renewal, particularly the renewal of bison. Nature had to be renewed through rituals which most likely took place at places of power, including rock art sites. This discussion links with Keyser and

Klassen's (2001) conclusion that the rock art of the Hoofprint Tradition is intrinsically entwined with bison and the society's reliance on bison, but hopefully serves to re-enforce the significance and all encompassing relationship of the society to bison as well as the interrelatedness of religion, subsistence and life on the Northern Plains.

CHAPTER SIX: CONCLUSIONS AND PRESERVATION

6.1 Conclusions and Preservation

Admittedly, the sample size of sites included in this research is small. While this is statistically problematic, it is unavoidable. Unfortunately, it is not possible to assign a particular cultural group or archaeological construct for any rock art site with any accuracy or certainty. Nonetheless, several conclusions can be made concerning rock art in southern Saskatchewan within the schemes put forth by Keyser and Klassen (2001), as well as perhaps clarify in more detail the relationships between the sites and the subtle distinctions within that area of the province. A discussion regarding issues involving preservation and education will follow.

6.2 Conclusions

The Crowstand Effigy is a historical rock art site. While the rock art is no longer in evidence, a clear history has been recorded regarding the impetus behind its creation. As such, it is not possible to place this monolith within the Keyser and Klassen (2001) scheme. It is important to mention, though, as it is one of the rock art examples we have with direct ethnographic connections.

The thunderbird is a significant motif across a broad range of cultures. It is a figure of religious symbolism and has been seen on rock art from locations ranging from Nova Scotia, across the plains of North America including in Saskatchewan, the southwestern United States, and places in South America, such as Peru (Mallery 1972). Often, it is regarded as a symbol of power; a being that rules the sky. Thunderbirds appear in Saskatchewan to the north of the Crowstand Effigy in the Canadian Shield. T.E.H. Jones reports that there are a number of thunderbird pictographs in the Churchill River region (Jones 1981). It is his postulation that

the pictographs were painted by individuals: most likely shamans that acted as religious specialists who interpreted the symbols for the group (Jones 1981). Dewdney has stated that the images from this region could be the result of dream symbols and individual vision-seeking (Dewdney 1963). Dr David Meyer of the University of Saskatchewan has also seen a similar thunderbird motif formed in lichen on a rock face near the rock painting at Thunderbird Bay, north of the village of Southend on Reindeer Lake (D. Meyer personal communication). It is unknown whether the historic rock art at Crowstand Effigy is directly related to any of the sites where thunderbirds appear, however, it is clear that the motif has powerful significance to those that used it prehistorically.

The Hazlet Site is a previously unrecognized member of Keyser and Klassen's (2001) Foothills Abstract Tradition. It clearly matches the morphology of the tradition, including the presence of ochre handprints and washes. This assertion has several implications. First, the heretofore recognized geographical zone for the tradition would have to be extended slightly to the east in order to include the Hazlet Site. Second, it can be concluded that the Hazlet Site represents ceremonial activity conducted by shamans. The obvious elongation of the handprints found at Hazlet could represent the presence of a spirit helper in the form of a bear. It could also represent a physical effect of an altered state of consciousness in which the trance induces the feeling of limbs stretching. The formation of the rock itself is also likely significant. The presence of the pictographs on the inner surface of the broken glacial erratic could signal a more private ceremonial space for fewer people. The 'opening' of the rock could have represented a 'doorway' into the spirit world, significant in the spiritual journeys of shamans worldwide. In general, it can be concluded the imagery at the Hazlet Site was based on the acquisition of power by shamans and most likely was linked to bear imagery. The inclusion of the Hazlet Site in the Foothills Abstract Tradition gives a unique look at the religious practice of prehistoric peoples in southern Saskatchewan.

The remainder of the sites are included in the Hoofprint Tradition described by Keyser and Klassen (2001). However, based on the current research a more subtle regional division can

be made. The rock art sites in the eastern portion of the province can be characterized as belonging to the Devil's Lake-Sourisford Burial complex. This characterization was made based on similarity of imagery including the presence of ringed necks on anthropomorphs, as well as faces with the "weeping eye" motif. Rock art sites in the western portion of Saskatchewan are morphologically related to the larger ribstone complex found in Alberta and Montana. Glyphstones, including Swift Current and Cabri Lake petroglyphs are linked to other glyphstones of similar morphology found in Alberta and discussed in Chapter 5. In addition it is likely, as stated by Buchner and Steinbring (1998), that these glyphstones are somehow related to the ribstone complex however, this relationship is unknown at this time. It is clear that the ribstone/glyphstone boulders found in the western region of the province are distinct from those in the east, based on the imagery used.

St. Victor is perhaps the most significant site in southern Saskatchewan. This site is a noteworthy and classic member of the Hoofprint Tradition described by Keyser and Klassen (2001). The imagery also represents a blend of both the eastern Saskachewan Devil's Lake Sourisford motifs and the glyphstone and ribstone motifs found in the western regions. The petroglyphs at St. Victor also represent a long time-scale including both prehistoric and historic carvings. This indicates that St. Victor was a multi-use site, utilized over a lengthy period of time by a number of different people or groups of people. The amount and diversity of rock art found at the site supports this conclusion.

If we assume that the rock art in Saskatchewan can be loosely divided into an eastern manifestation and a western manifestation, this in turn has implications. It can be concluded that rock art in the eastern portion of the province was most likely done by Siouan speakers. The rock art found in the western section of the province was most likely done by Algonkian speakers. In general, then, it can be said that Saskatchewan is a geographical region in which a continuum of rock art styles are represented. Different aspects of smaller pockets of activity can be discerned within the larger classification of the region as a manifestation of Keyser and Klassen's Hoofprint Tradition.

6.3 Preservation and Education

It is widely accepted that public education is a key factor in preserving rock art sites. The general population needs to know the significance of rock art in order to fully appreciate its value. Vandalism continues to be a concern. Sites such as Roche Percée, near Estevan, Saskatchewan, have been all but obliterated by vandals. The very characteristics that may have attracted prehistoric people to these sites have caught the interest of modern 'artists'; rock surfaces soft enough to make a mark but solid enough to retain it. Most mechanical means of preventing erosion, such as sealing the rock face, have proven unsuccessful. There is a significant balancing act between providing access to the art for the edification of the public and preserving the art for generations to come. What then, is to be done regarding rock art sites in southern Saskatchewan? At least one site, the Swift Current petroglyph, has been considered for development as an interpretive site for visitors. Two sites will be discussed as case studies and then recommendations will be made.

St. Victor has been developed as an interpretive visitor site by the construction of a parking lot, information display, toilets, barbeques, picnic area, and wooden stairway leading to the petroglyph site. There is no supervision for visitors to the site. When examining the site, it is clear that not everyone stays on the wooden walkway, as there is evidence of graffiti. Alan Watchman of Université de Laval states in his contribution to Steinbring and Buchner's 1998 report that he observed evidence of latex casting, paint and wax, making dating the site impossible. The vandalism that is present unfortunately encourages further vandalism by subsequent visitors. Watchman (Steinbring and Buchner 1998) also notes that access to the site is limited to the able bodied because the petroglyphs are not accessible to those in wheel chairs or unable to walk up a lengthy flight of stairs. Natural processes of erosion, including a rockfall, have already led to significant damage at the site and continue to be a concern.

In contrast, the Herschel Petroglyphs have been developed in a different way. An interpretive center has been established in the old school in the town of Herschel. Information

about the petroglyphs and other significant areas in the region is available at the Earth Echoes Interpretive Centre. The petroglyph site is closely observed by inhabitants of the town. It is not possible to access the site, which is enclosed in a fence, without arousing the attention of the town's inhabitants. Tours can be arranged by calling in advance. For the purpose of this research, Dave Neufeld was contacted and a guided tour was arranged. Mr. Neufeld is knowledgeable about the site and imparts a significant amount of information to visitors. It is clear that the site is a significant source of pride for the community, and as such, it is protected in a way that St. Victor was and is not.

In order to protect the rock art sites in southern Saskatchewan the following recommendations are being made. First, a great amount of research and planning should be undertaken before any tourist developments are started. Careful consideration should be made regarding the results of the development of the St. Victor Petroglyph site. Second, access should be restricted. Uncontrolled tourism has not proven to be successful, therefore a guided tour scenario should be enacted in order to protect the rock art. Third, regardless of development, site management and conservation efforts should be put forth by the Heritage Branch in order that further damage be curtailed and preservation is ensured.

BIBLIOGRAPHY

Amundson, Leslie J. and David Kelly
1987 *St. Victor's Petroglyphs Petroglyphs Provincial (Historic) Park: Stereophotographic Imaging Project.* Report submitted to Parks Branch, Saskatchewan Parks, Recreation and Culture, Regina.

Archaeological Society of Alberta
1980 *Story on Stone.* Lethbridge Centre.

Barry, P.S.
1991 *Mystical Themes in Milk River Rock Art.* University of Alberta Press, Edmonton.

Buchner, A.P., and J.H. Steinbring
1998 *The Southwestern Saskatchewan Rock Art Project: Report on the 1992m 1993, and 1994 Field Seasons at the Herschel (EjOc-3), Swift Current (EbNw-15), Gouldtown, Cabri Lake (EgOk-10) and Hazlet (EcOe-1) Sites.* Report submitted to Saskatchewan Heritage Branch, March 1998.

Carlson, Muriel
1994 The Wood River Petroglyph. *Saskatchewan Archaeological Society Newsletter*, vol. 15 no.1.

Deacon, Janette
1988 The Power of Place in Understanding Southern San Rock Art Carvings. *World Archaeology*, vol 20. issue 1 Archaeology in Africa.

Dewdney, Selwyn
1963 Indian Rock Art. *Popular Series* No. 4. Saskatchewan Museum of Natural History, Regina, Saskatchewan.

Fedirchuk, Gloria and Edward J. McCullough
1991 Prehistoric Art and Spriritualism: A Perspective from Pine Coullee, Alberta. *Alberta Archaeological Review* no. 22.

Greer, Mavis and John Greer
1999 Handprints in Montana Rock Art. *Plains Anthropologist*, vol. 44, no. 167.

Harrod, Howard L.
1987 *Renewing the World: Plains Indian Religion and Morality.* University of Arizona Press, Tucson.

Houston, Marvel
1993 An Update on the Herschel Petroglyph (EjOc-3). *Saskatchewan Archaeological Society Newsletter*, vol. 14 no. 2.

Jones, Timothy E.H.
1974 *Aboriginal Rock Paintings of the Churchill River.* Thesis submitted to the College of Graduate Studies and Research, University of Saskatchewan, Saskatoon, Saskatchewan.
1981 The Aboriginal Rock Paintings of the Churchill River. *Anthropological Series,* Saskatchewan Museum of Natural History, No. 4. Saskatchewan Department of Culture and Youth, Regina, Saskatchewan.

Jones, T.E.H and Louise Jones
1982 *The Saint Victor Petroglyphs: Description and Condition Report.* Report submitted to Saskatchewan Museum of Natural History, Regina.

Keyser, James D. and Michael A. Klassen
2001 *Plains Indian Rock Art.* University of Washington Press, Seattle and London.

Klaus, J.F.
1968 The Crowstand Effigy Rock. *NAPAO,* vol. 1 no. 2.

Mallery, Garrick
1972 *Picture Writing of the American Indians.* Dover Publications, INC. New York, New York, United States.

McDougall, Frank
1992 Two Hilltop Petroglyphs in the Strasbourg Area. *Saskatchewan Archaeological Society Newsletter,* vol. 13 no. 6.

Orchard, W.J.
1942 *The Stone Age on the Prairies.* School Aids and Textbook Publishing Company Limited, Regina and Toronto.

Parkman, E. Breck
1998 Observations Concerning the Herschel Site, and Other Rock Art Occurrences in Southwestern Saskatchewan and Adjacent Alberta, Canada. Appendix 2. *The Southwestern Saskatchewan Rock Art Project: Report on the 1992m 1993, and 1994 Field Seasons at the Herschel (EjOc-3), Swift Current (EbNw-15), Gouldtown, Cabri Lake (EgOk-10) and Hazlet (EcOe-1) Sites* by A.P. Buchner and J.H. Steinbring. Report submitted to Saskatchewan Heritage Branch, March 1998.

Pohorecky, Zenon
1970 *Saskatchewan Indian Heritage: The First 200 Centuries.* Extension Division, University of Saskatchewan, Saskatoon.

1979 Faces Carved on Boulders in Southern Saskatchewan. Unpublished paper presented at XLIII International Congress of Americanists, Vancouver, B.C., August 16.

Sanger, Kay Kenady and Clement Meighan
1990 *Discovering Rock Art: A Recording Manual.* Wormwood Press, Calabasas, California.

Steinbring, Jack
1992 Graphic and Non-Graphic Forms: An Hypothesis Regarding Their Distinction and Relationships in the Study of "Rock Art". *Ancient Images, Ancient Thought: the Ideology of Archaeology.* Proceedings of the 23rd Annual Chacmool Conference, Goldsmith, Garvie, Selin and Smith, eds. The Archaeological Association of the University of Calgary, Calgary, Alberta.

Sundstrom, Linea
1981 *Rock Art of the Southern Black Hills, South Dakota and Wyoming.* Publications in Anthropology 2, Archaeology Laboratory, South Dakota State University, Brookings.
1993 *Fragile Heritage: Prehistoric Rock Art of South Dakota.* Vermillion: South Dakota Historical Preservation Center, South Dakota.

Syms, Leigh
1979 The Devil's Lake Sourisford Burial Complex on the Northeastern Plains. *Plains Anthropologist* vol. 24, no. 86.

Walker, E.G.
1999 Precontact Archaeology of Southern Saskatchewan. *Atlas of Saskatchewan.* Ka-iu Fung ed. University of Saskatchewan, Saskatoon, Saskatchewan.

Wintemberg, W.J.
1939 Petroglyphs of the "Roche Percee" and Vicintity, Saskatchewan. *Transactions of the Royal Society of Canada*, Series 3, vol. 33, section II.

APPENDIX

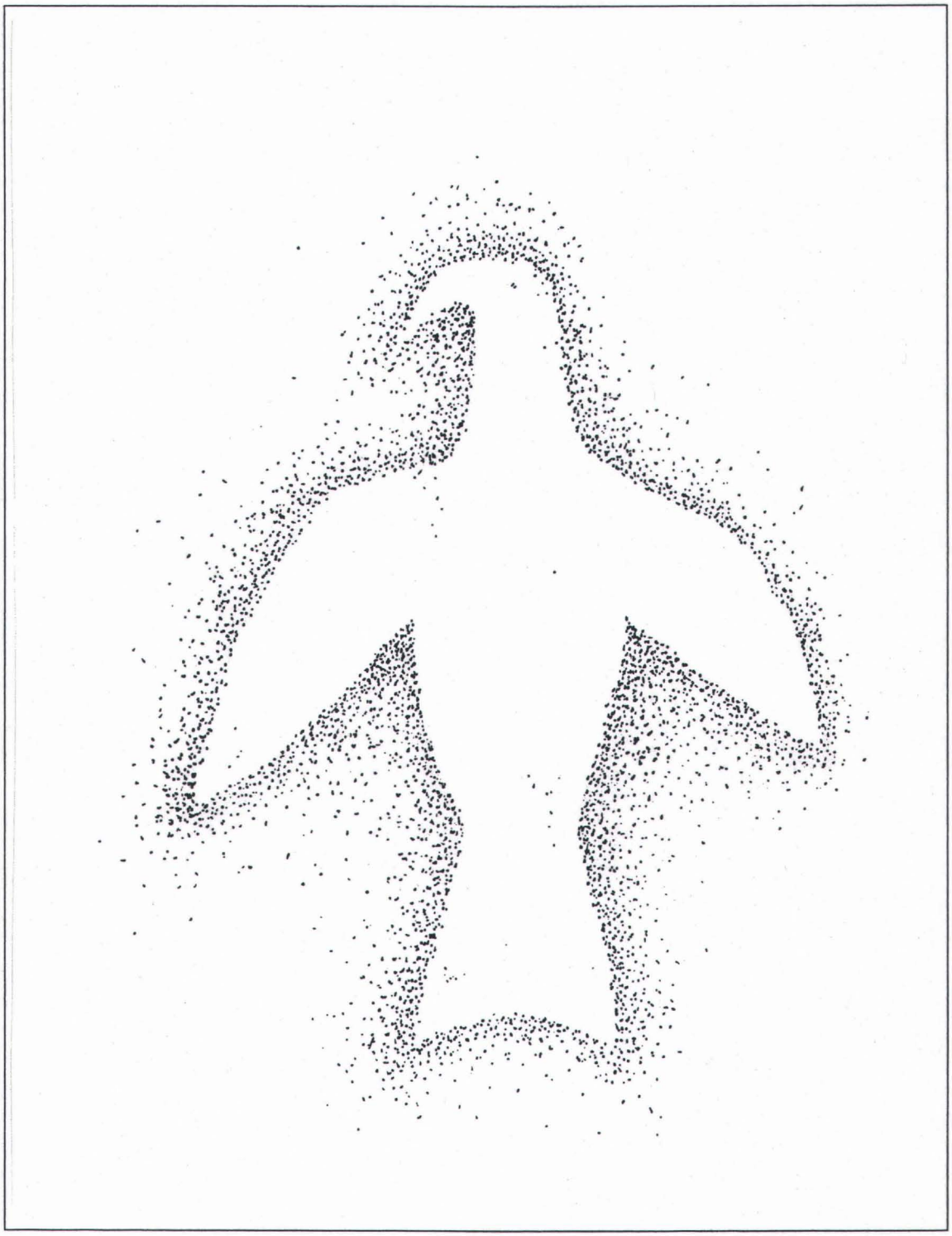


Figure A1 Crowstand Effigy

Bird motif carved into lichen now destroyed.

Drawing by E. Schneider.

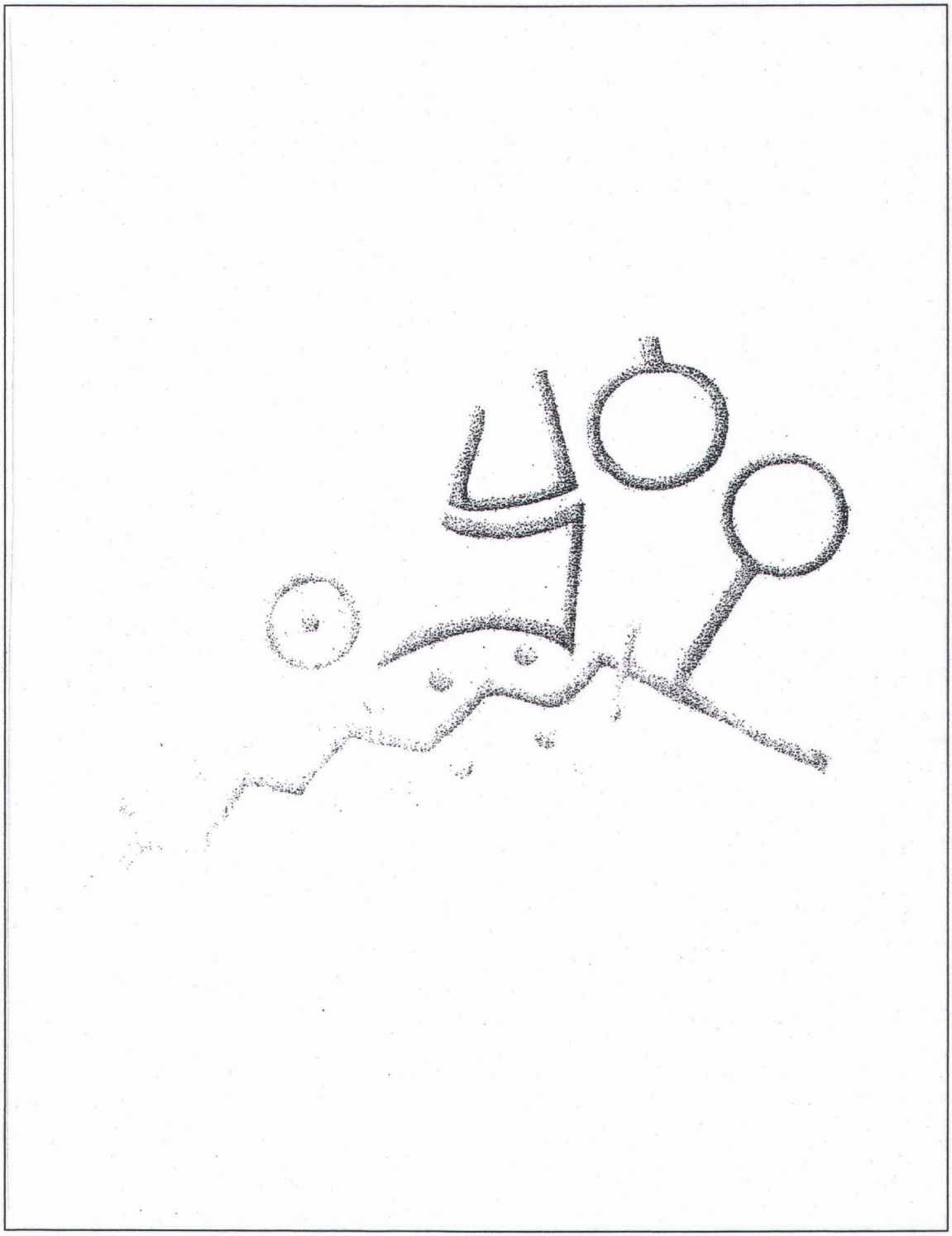
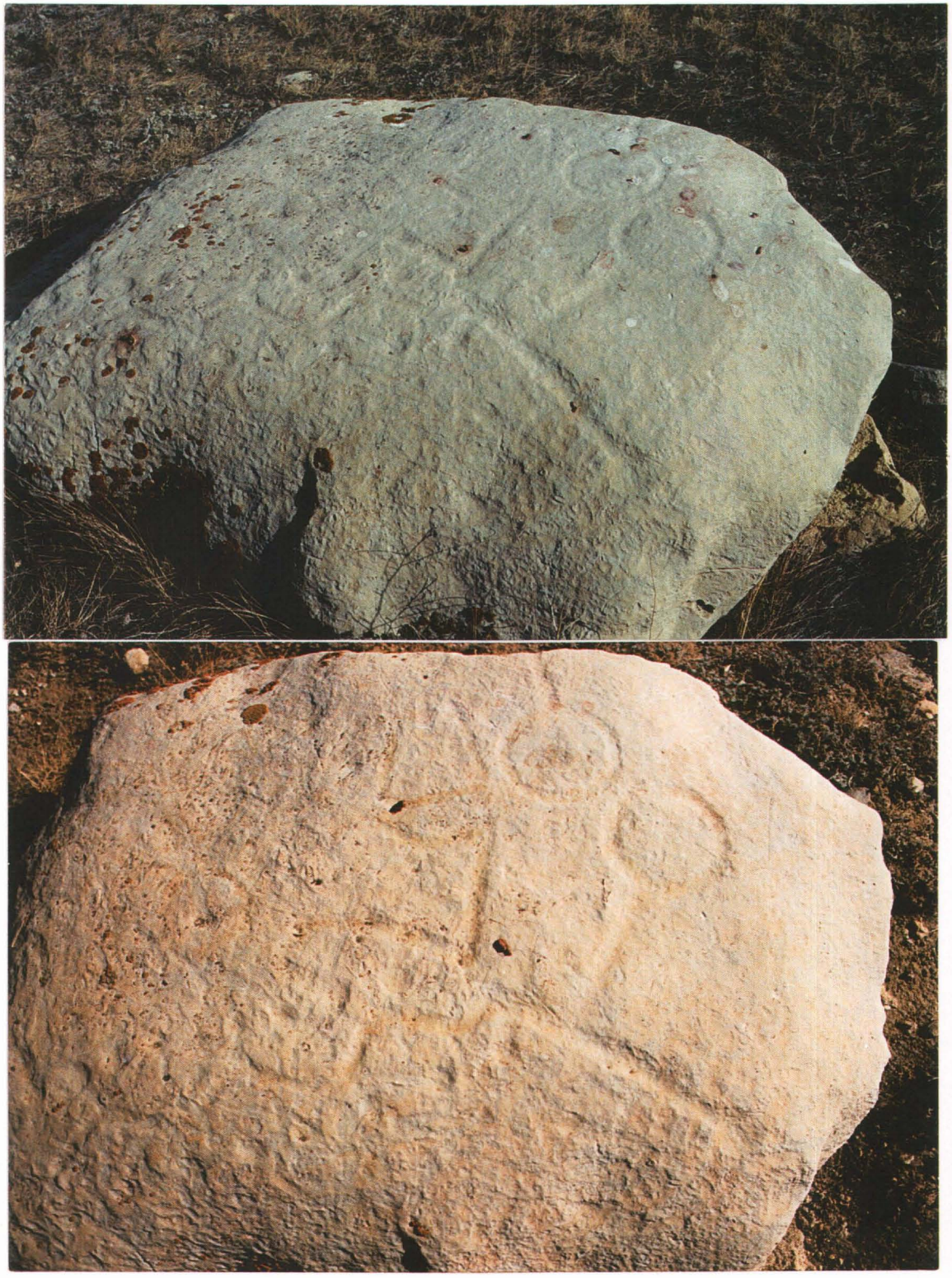


Figure A2 Cabri Lake Petroglyph

Carving seen on rockface.

Drawing by E. Schneider.



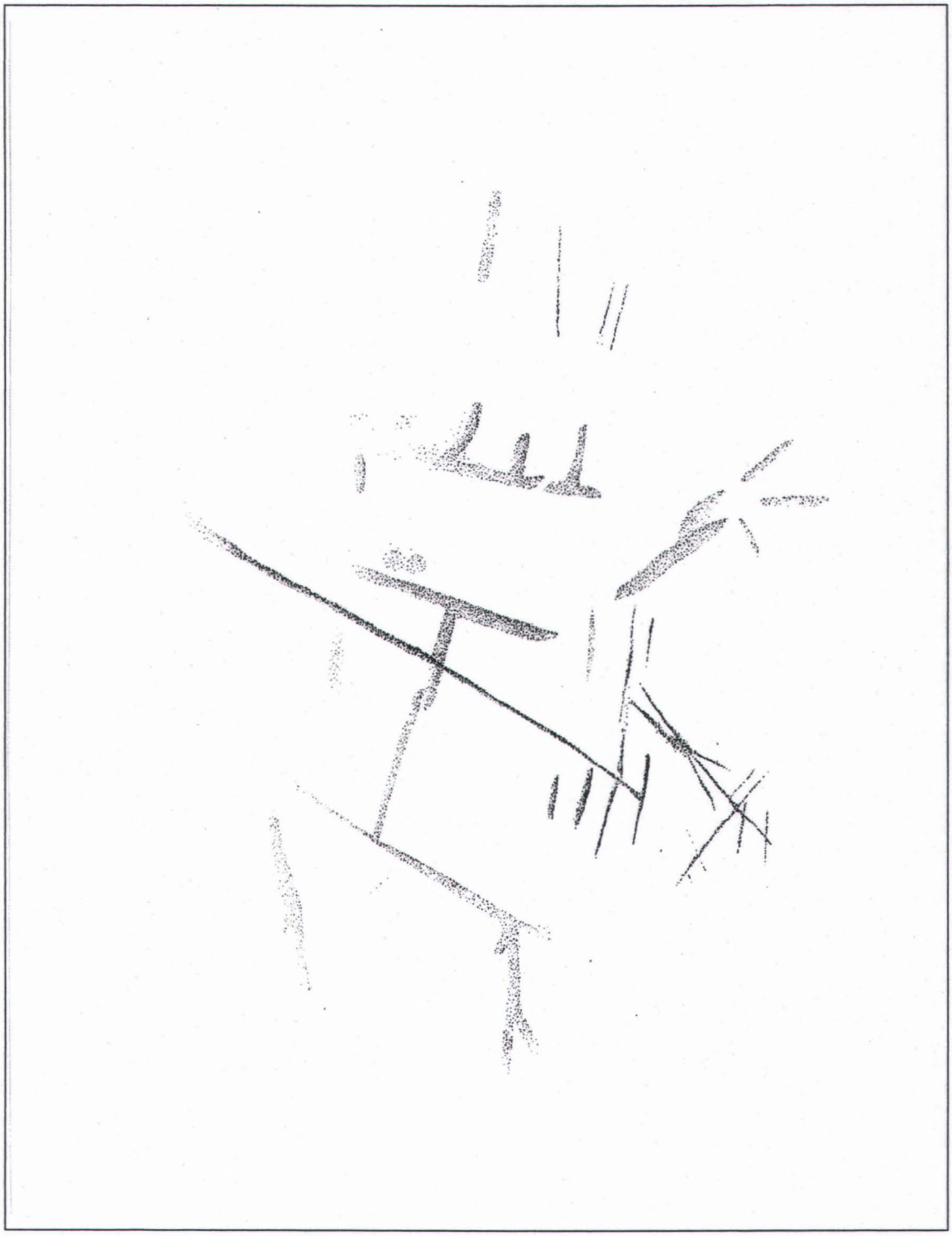
Cabri Lake Petroglyph
Figure A3 (TOP) Rock face bearing carved motifs.
Figure A4 (BOTTOM) Photograph taken at dusk.

Photographs taken by E. Schneider.

Cabri Lake Petroglyph

Figure A5 Environmental context.

Photograph by E. Schneider.



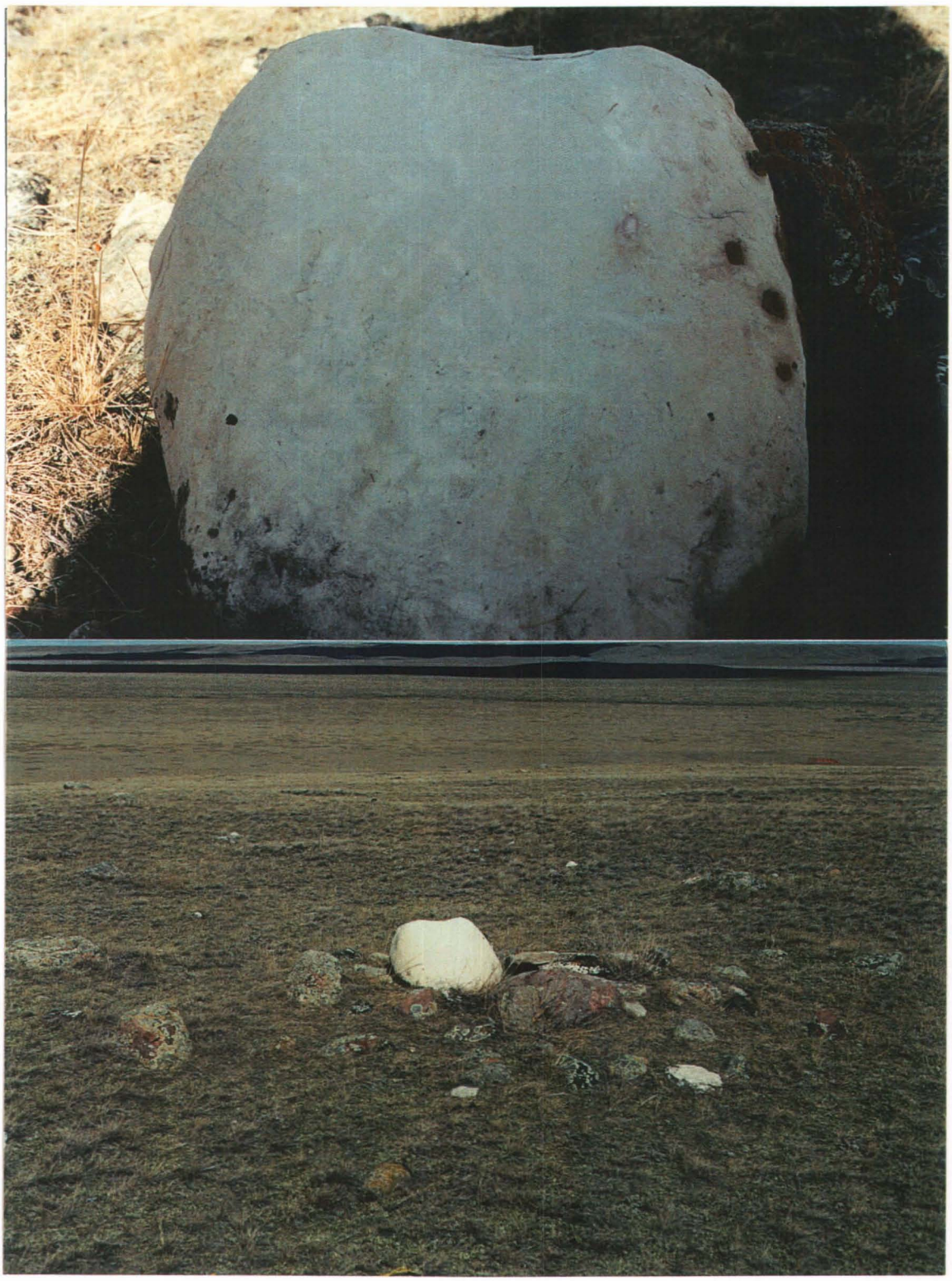
Leader Petroglyph

Figure A6 Lightly incised motif on rock face.

Drawing by E. Schneider.

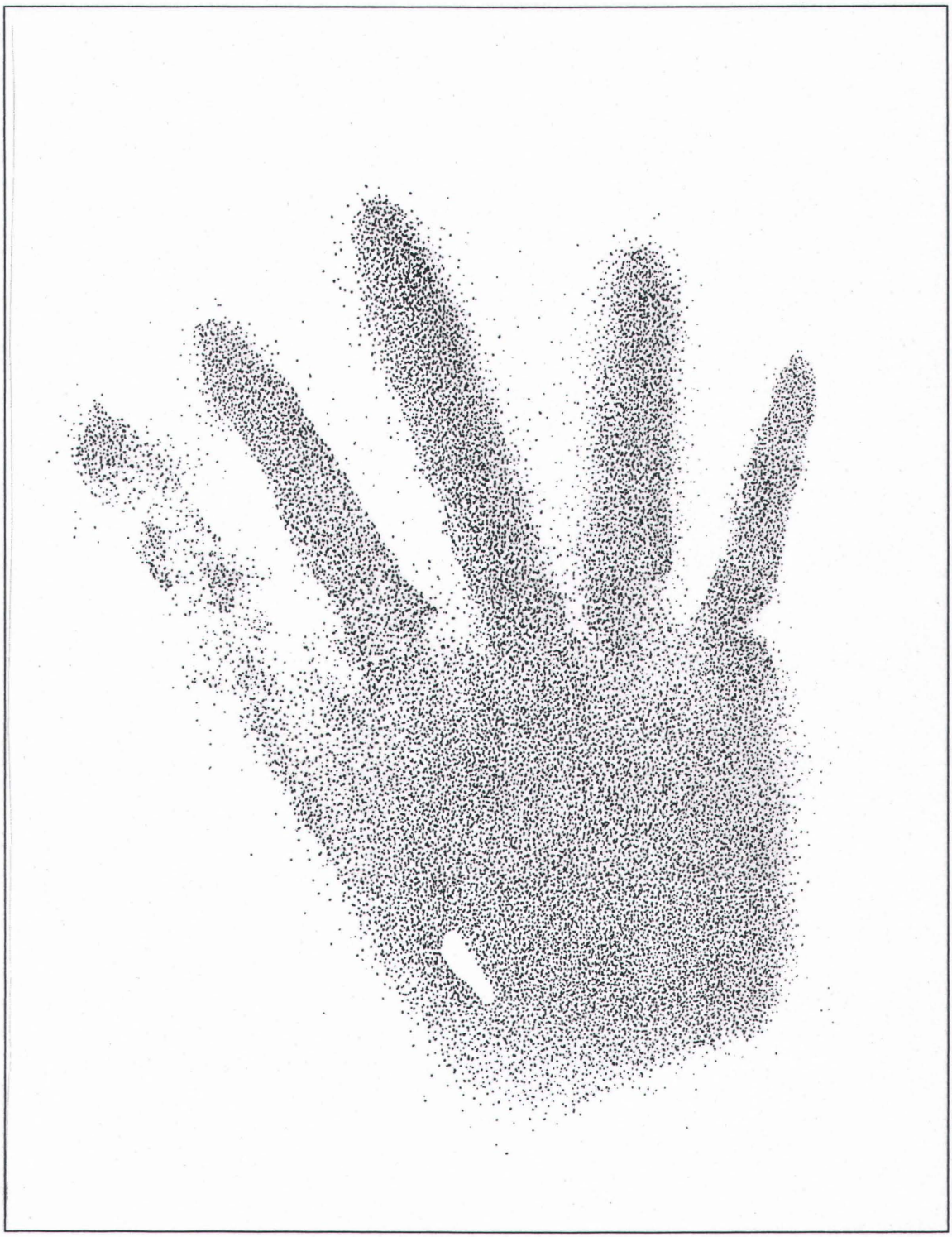
Leader Petroglyph
Figure A7 (TOP) Rock face in direct sunlight (dry).
Figure A8 (BOTTOM) Rock face in cast shadow (wet).

Photographs by E. Schneider.



Leader Petroglyph
Figure A9 (TOP) Close up of wet rock face in cast shadow.
Figure A10 (BOTTOM) Environmental context.

Photographs by E. Schneider.



Hazlet Pictographs
Figure A11 Handprint #1.
Most complete handprint on the rock face.

Drawing by E. Schneider.

Hazlet Pictographs
Figure A12 Handprint #2.
Exfoliation indicated.

Drawing by E. Schneider.

Hazlet Pictographs
Figure A13 Handprint #3.
Least complete and largest handprint.

Drawing by E. Schneider.

Hazlet Pictographs
Figure A14 (TOP) Rock face in its entirety.
Figure A15 (BOTTOM) Handprint #1 (wet).

Photographs by E. Schneider.

Hazlet Pictographs
Figure A16 (TOP) Handprint #2 (wet).
Figure A17 (BOTTOM) Handprint #3 (wet).

Photographs by E. Schneider.

Hazlet Pictographs

Figure A18 Handprint #2 (dry).

Photograph by E. Schneider.

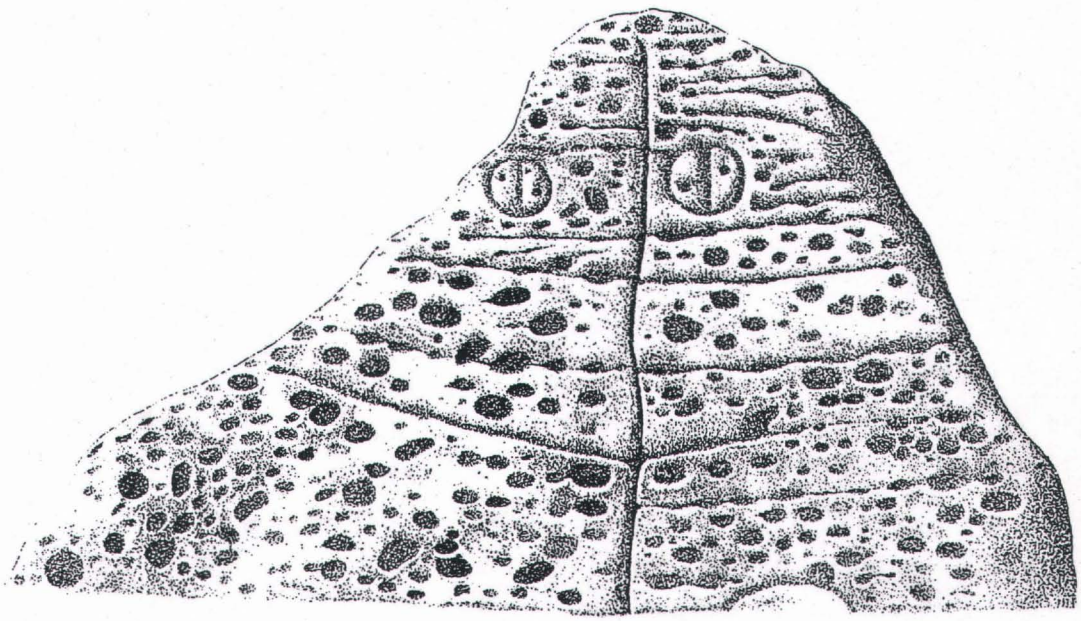
Hazlet Pictographs

Figure A19 Handprint #3 (dry).

Photograph by E. Schneider.

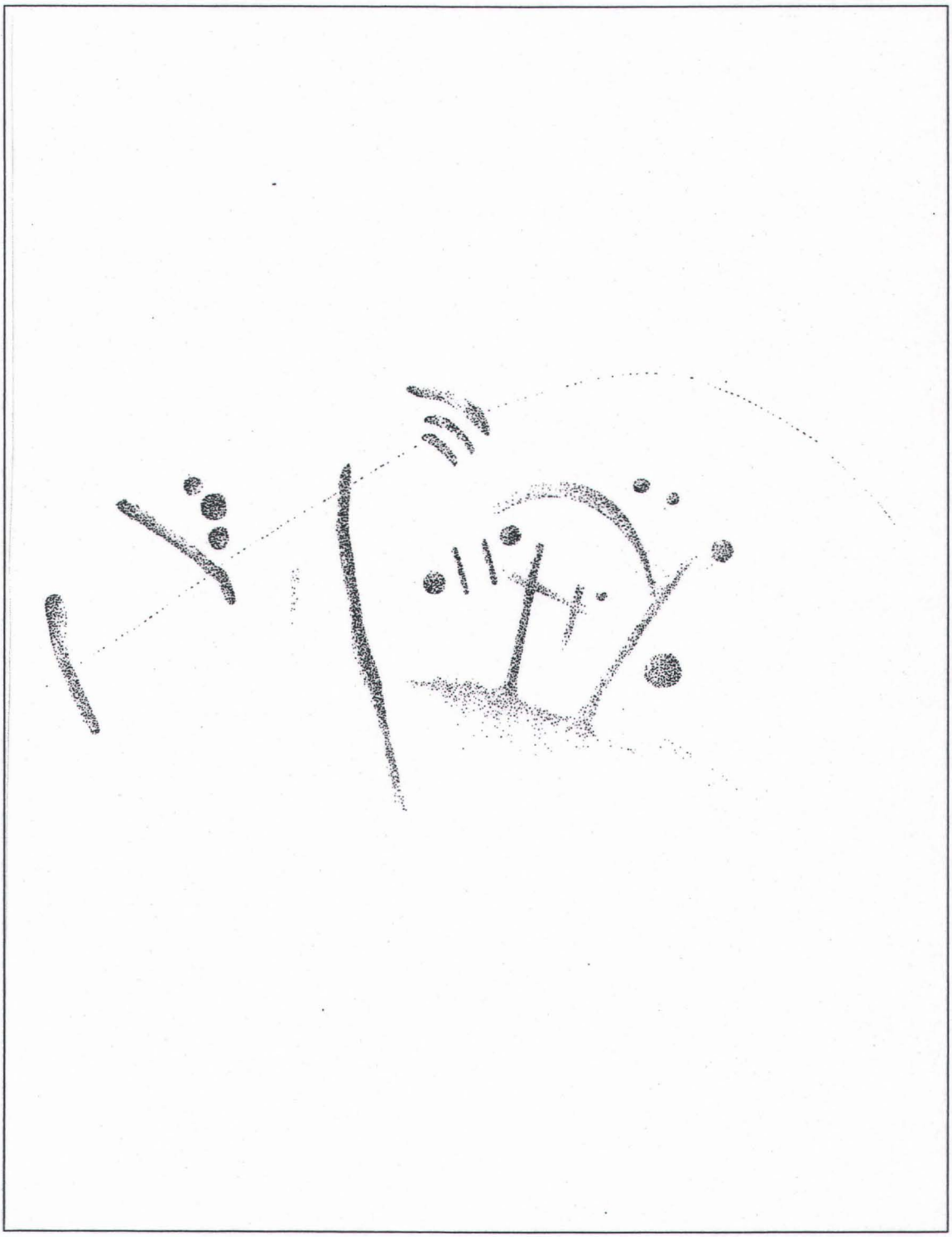
Hazlet Pictographs
Figure A20 (TOP) Handprint #1 (dry).
Figure A21 (BOTTOM) Environmental context.

Photographs by E. Schneider.



Herschel Petroglyphs
Figure A22 Monolith #1.
View from front of monolith.

Drawing by E. Schneider.



Herschel Petroglyphs
Figure A23 Monolith #2.
Motif carved into rock surface.

Drawing by E. Schneider.

Herschel Petroglyphs
Figure A24 Monolith #3.
Smallest of the petroglyphs, note edge grooving.

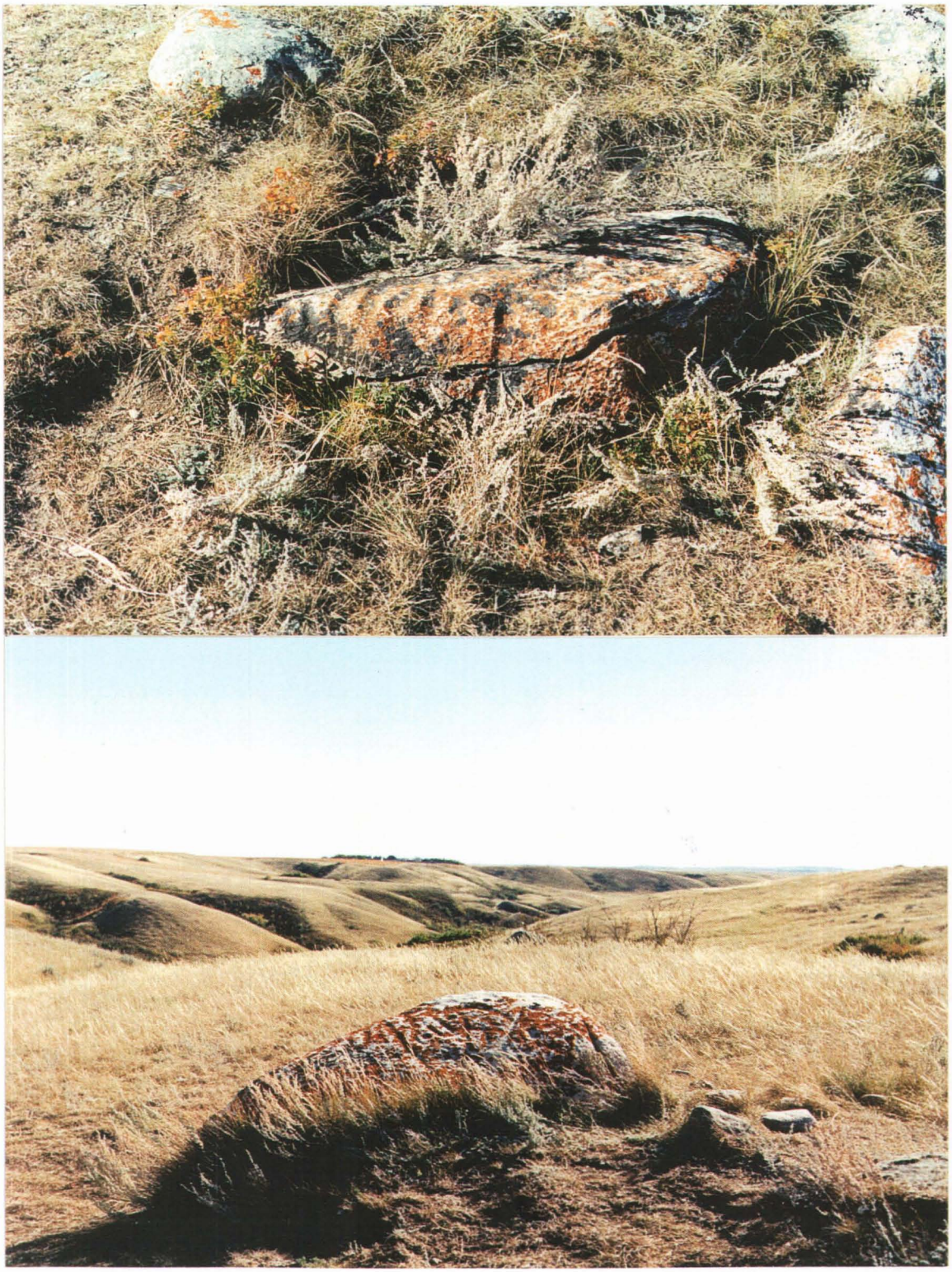
Drawing by E. Schneider.

Herschel Petroglyphs
Figure A25 (TOP) Monolith #1 view from front.
Figure A26 (BOTTOM) Monolith #1 view from side.

Photographs by E. Schneider.

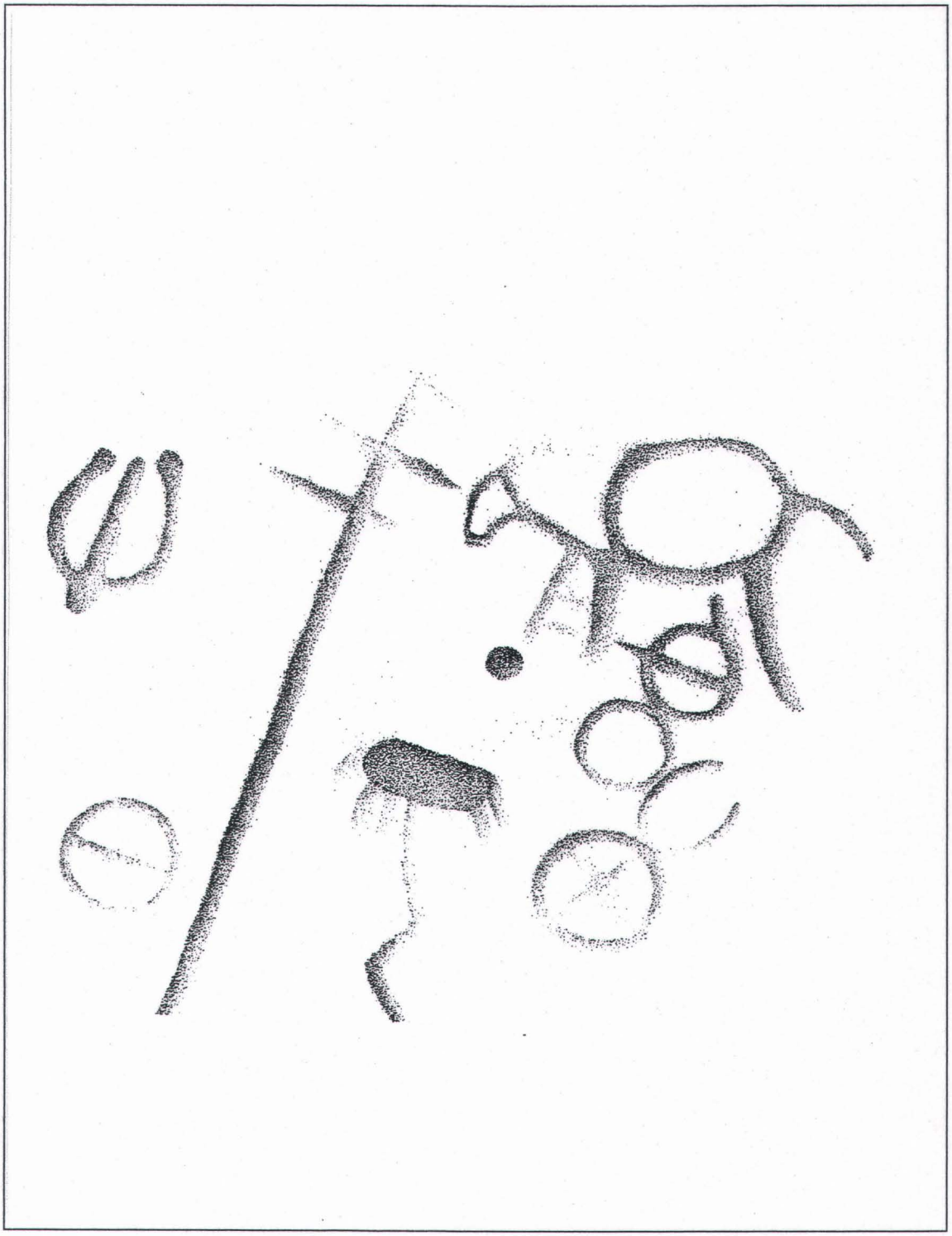
Herschel Petroglyphs
Figure 27 (TOP) Monolith #2 view from front.
Figure 28 (BOTTOM) Monolith #2 close up.

Photographs by E. Schneider.



Herschel Petroglyphs
Figure A29 (TOP) Monolith #3.
Figure A30 (BOTTOM) Environmental context.

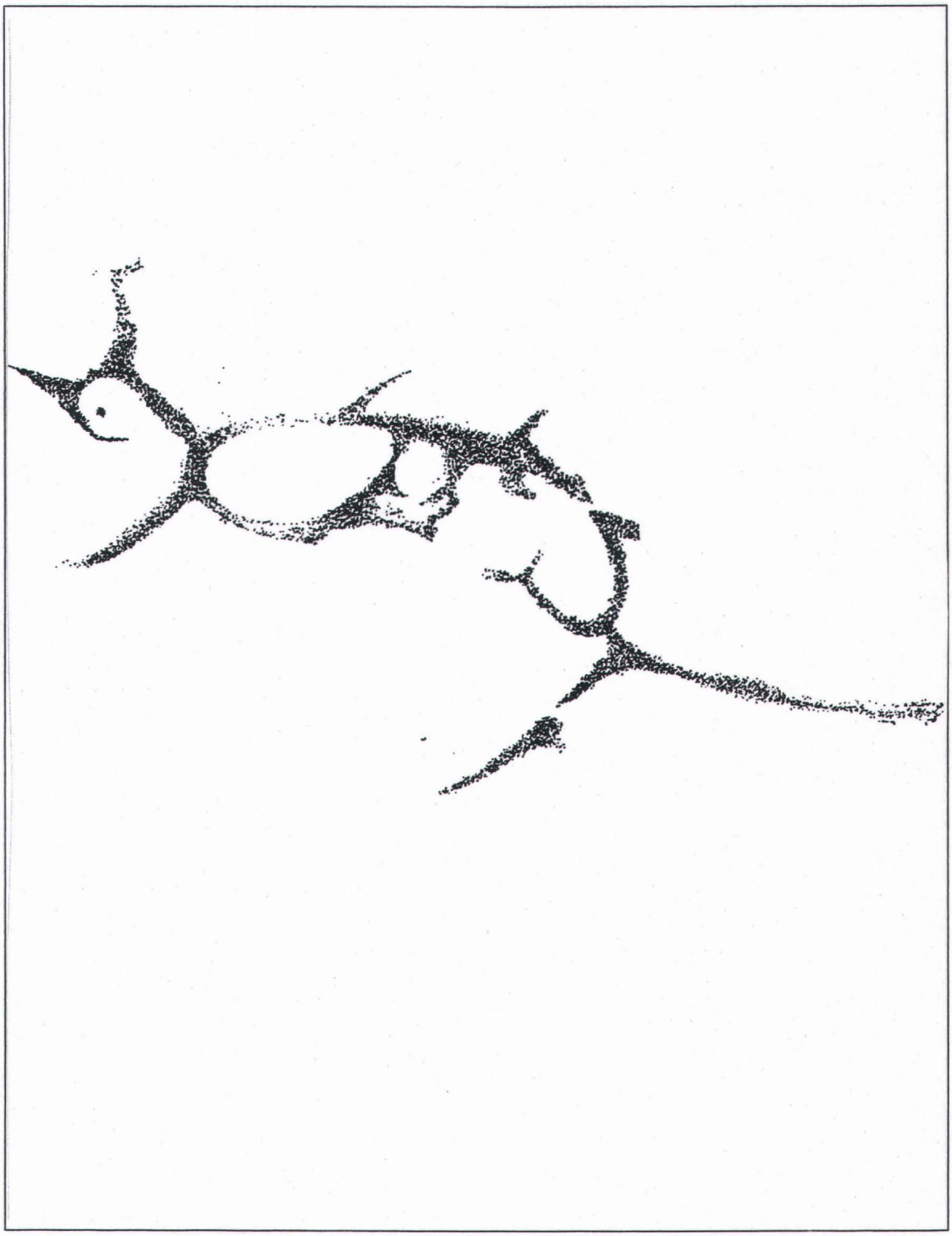
Photographs by E. Schneider.



Swift Current Petroglyph

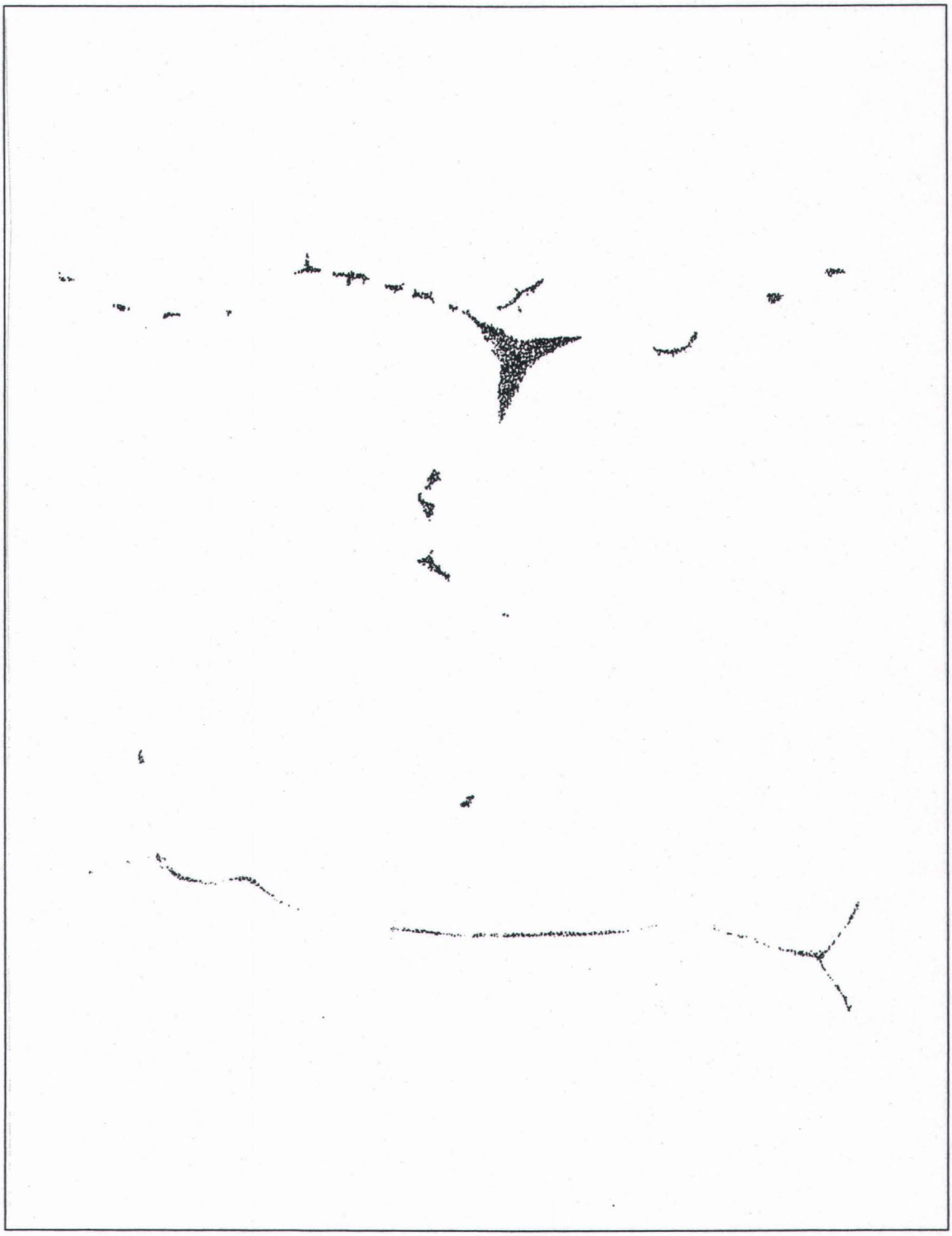
Figure A31 Motifs carved into rock face.

Drawing by E. Schneider.



Swift Current Petroglyph

Figure A32 Pictograph #2 now re-buried.
Based on material from (Buchner and Steinbring 1998).
Drawing by E. Schneider.



Swift Current Petroglyph

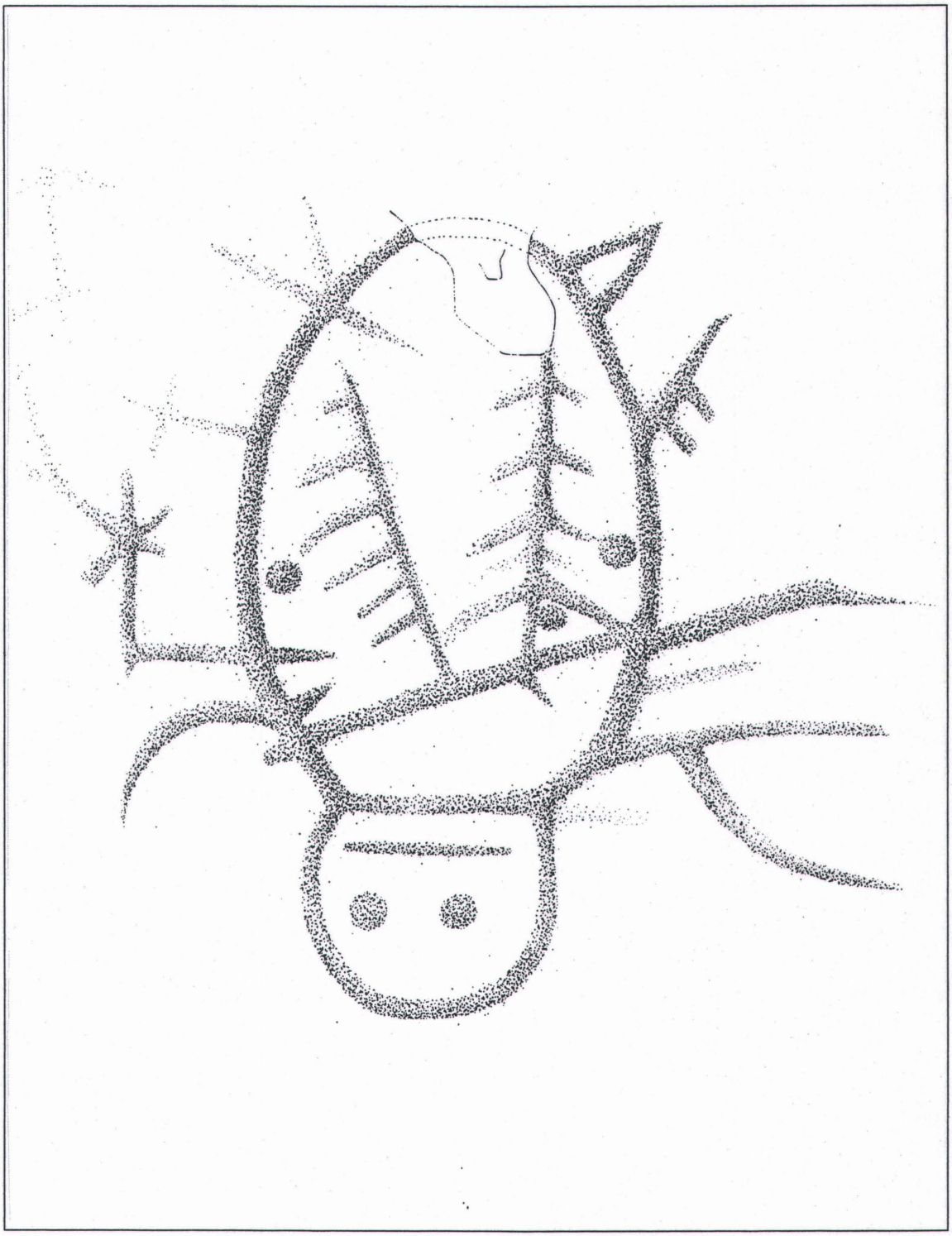
Figure A33 Pictograph #1 (TOP) and #3 (BOTTOM) now re-buried.
Based on material from (Buchner and Steinbring 1998).
Drawing by E. Schneider.

Swift Current Petroglyph
Figure A34 (TOP) View of rock face from front.
Figure A35 (BOTTOM) Close up of carved motifs (wet).

Photographs by E. Schneider.

Swift Current Petroglyph
Figure A36 (TOP) Close up of zoomorphic figure (wet).
Figure A37 (BOTTOM) Environmental context.

Photographs by E. Schneider.

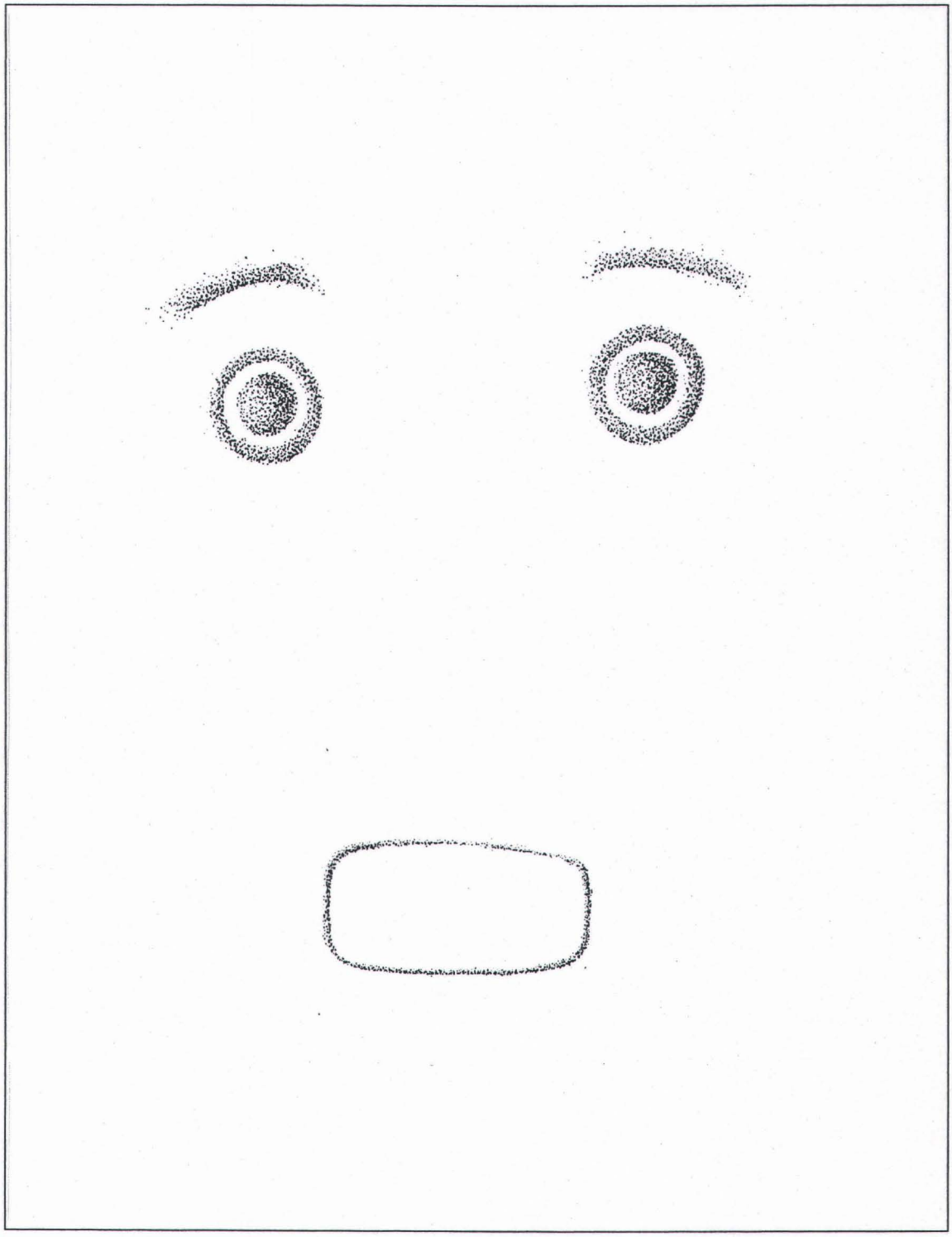


Gouldtown Petroglyph

Figure A38 Zoomorphic figure carved into rock face.

Drawing by E. Schneider.

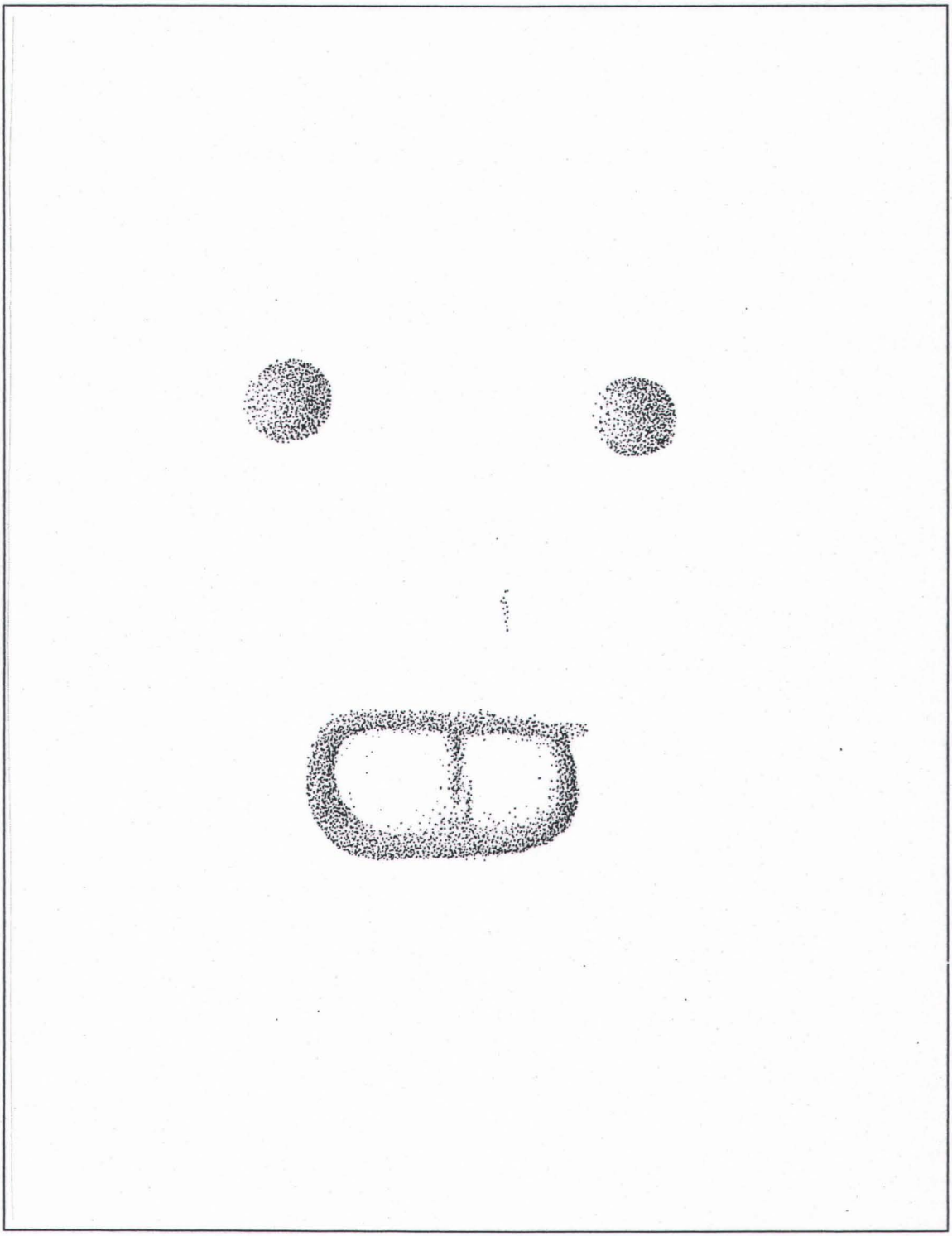
Gouldtown Petroglyph
Figure A39 (TOP) View of rock face from front (wet).
Figure A40 (BOTTOM) View of rock face from side (wet).
Note shed in background.
Photographs by E. Schneider.



Wood River Petroglyph

Figure A41 Face carved on rock face.

Drawing by E. Schneider.



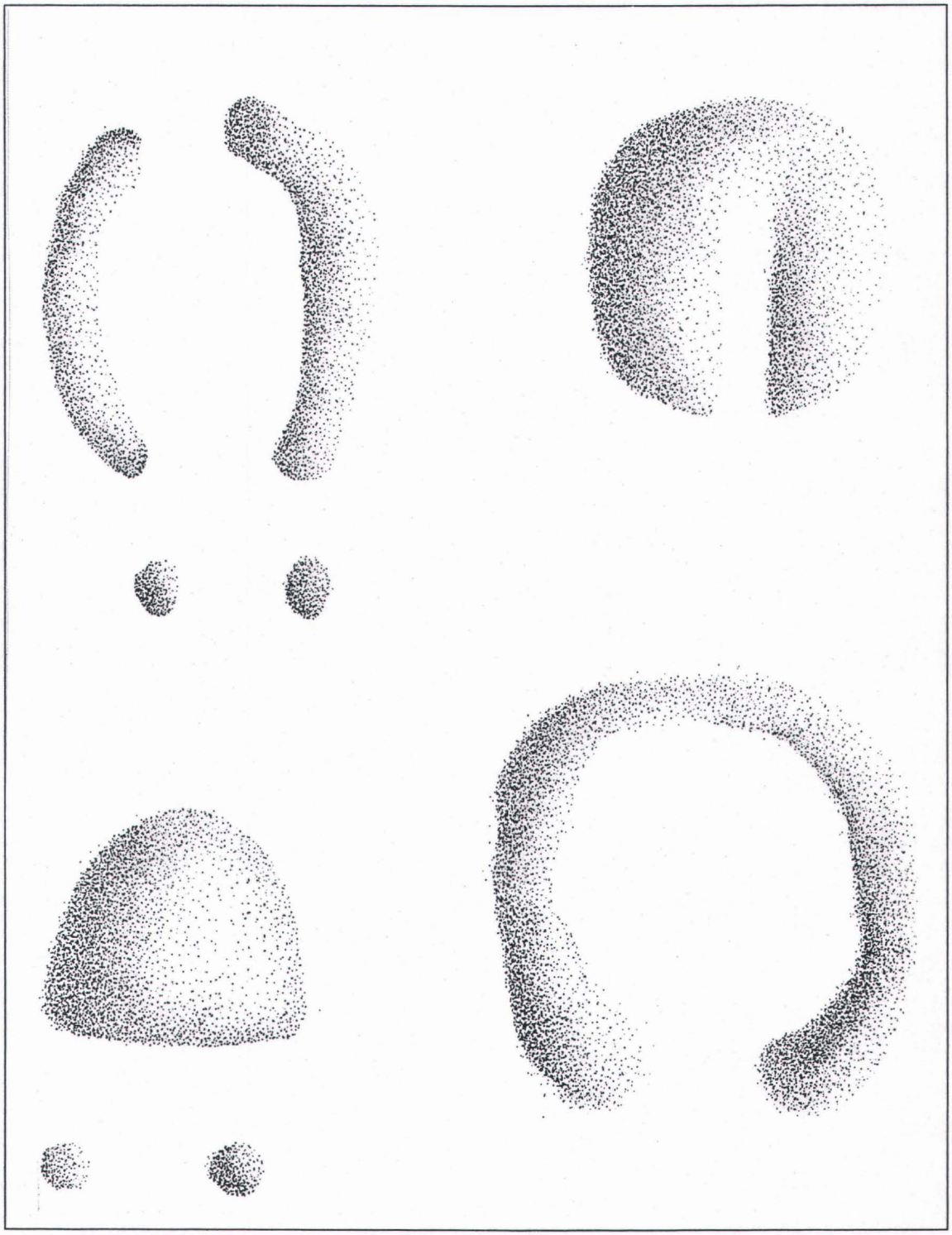
Wood River Petroglyph

Figure A42 Carved face on opposing side of boulder.

Drawing by E. Schneider.

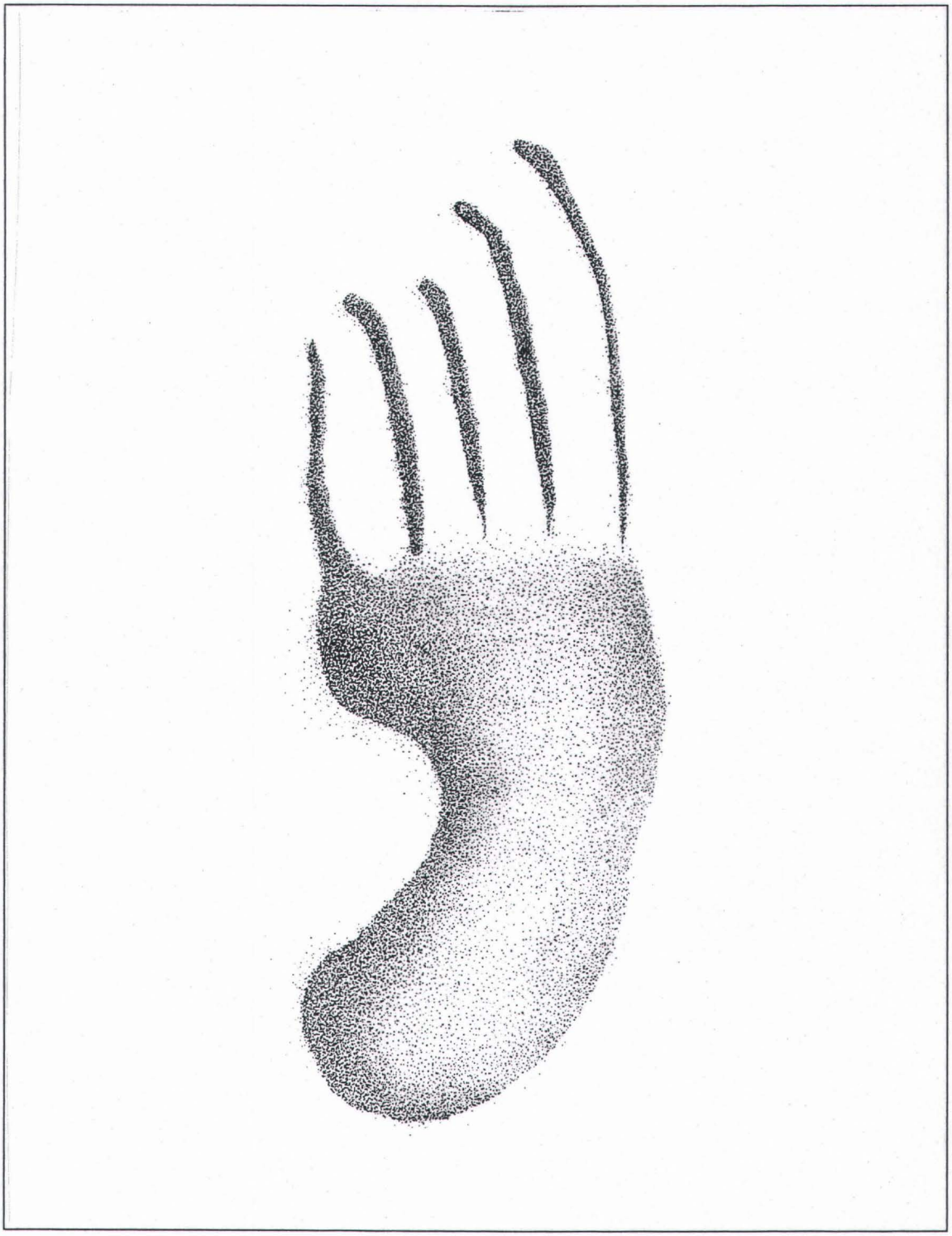
Wood River Petroglyph
Figure A43 (TOP) Carved face on boulder.
Figure A44 (BOTTOM) Face on opposite side of boulder.

Photographs by E. Schneider.



St. Victor Petroglyphs
Figure A45 Variety of hoofprints found at St. Victor.
Note presence of dew claws.

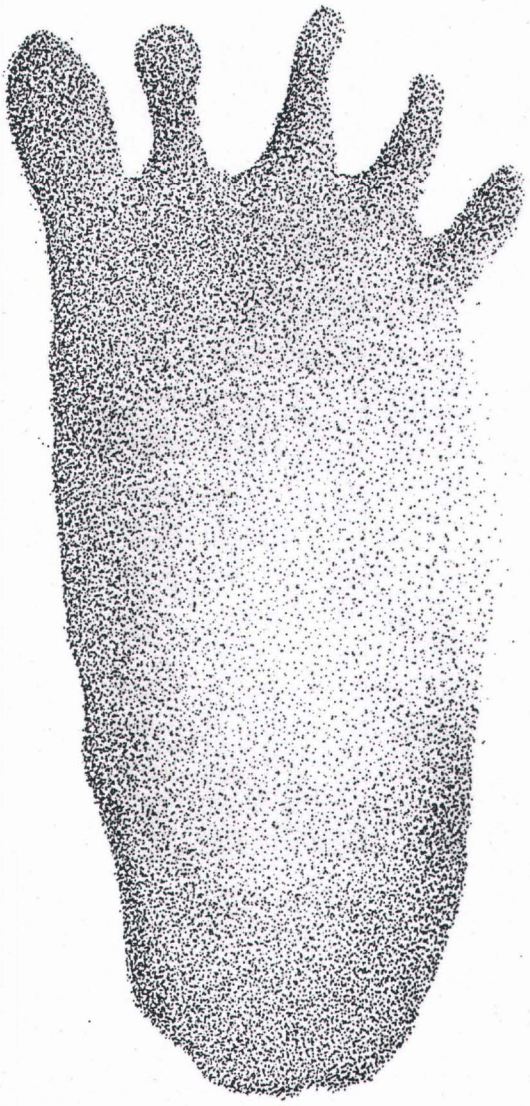
Drawing by E. Schneider.



St. Victor Petroglyphs

Figure A46 Bearclaw.

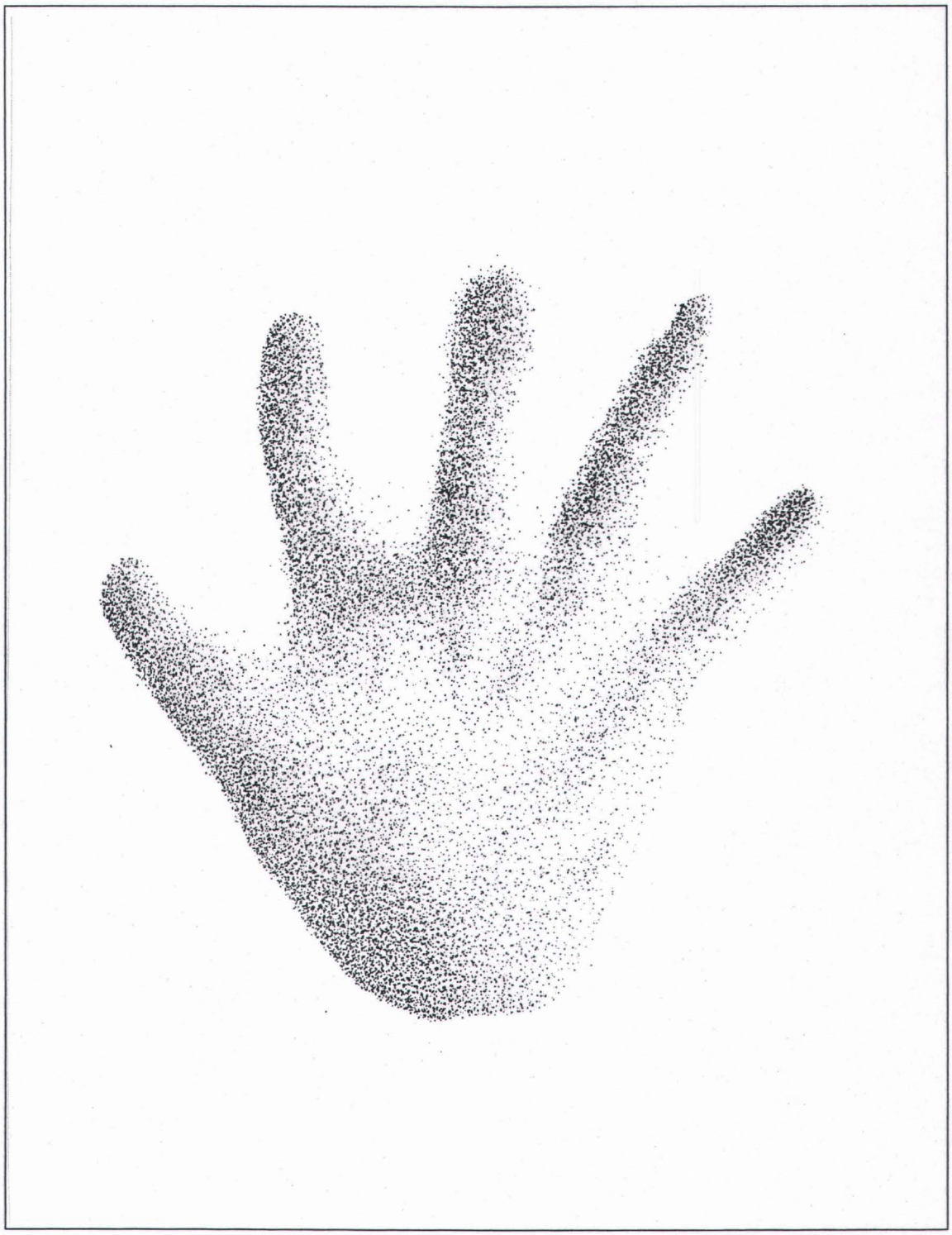
Drawing by E. Schneider.



St. Victor Petroglyphs

Figure A47 Human footprint.

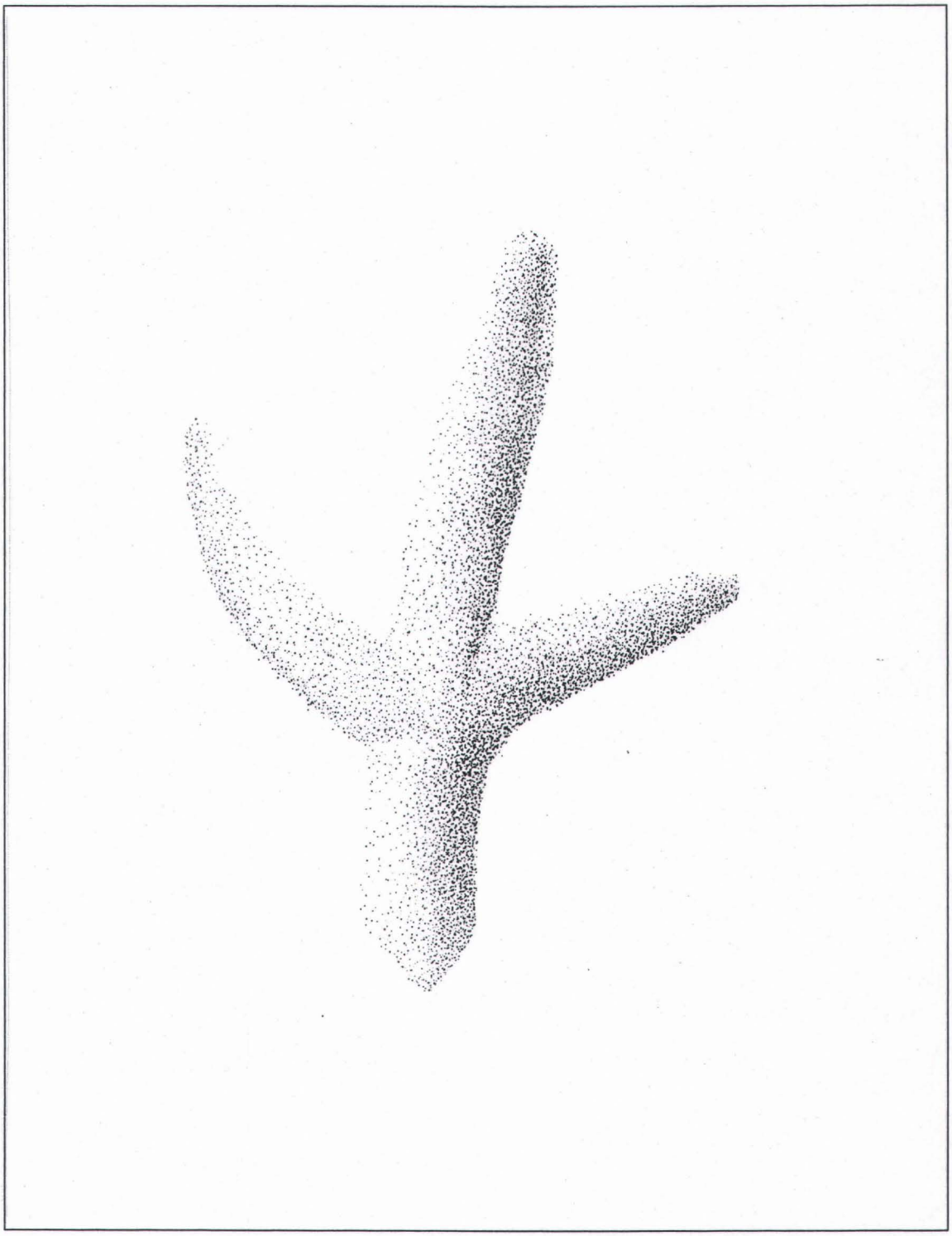
Drawing by E. Schneider.



St. Victor Petroglyphs

Figure A48 Human Handprint.

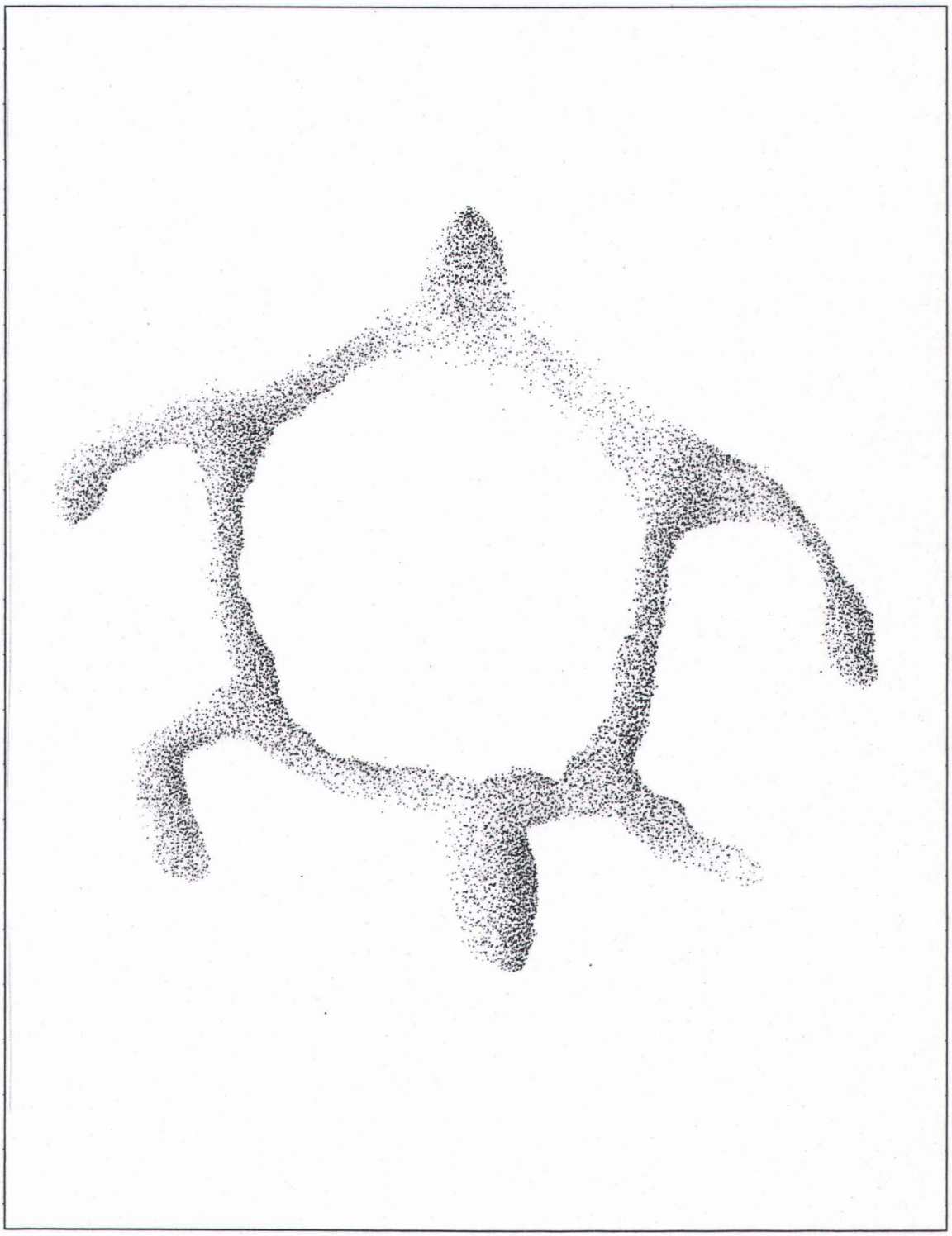
Drawing by E. Schneider.



St. Victor Petroglyphs

Figure A49 Bird track.

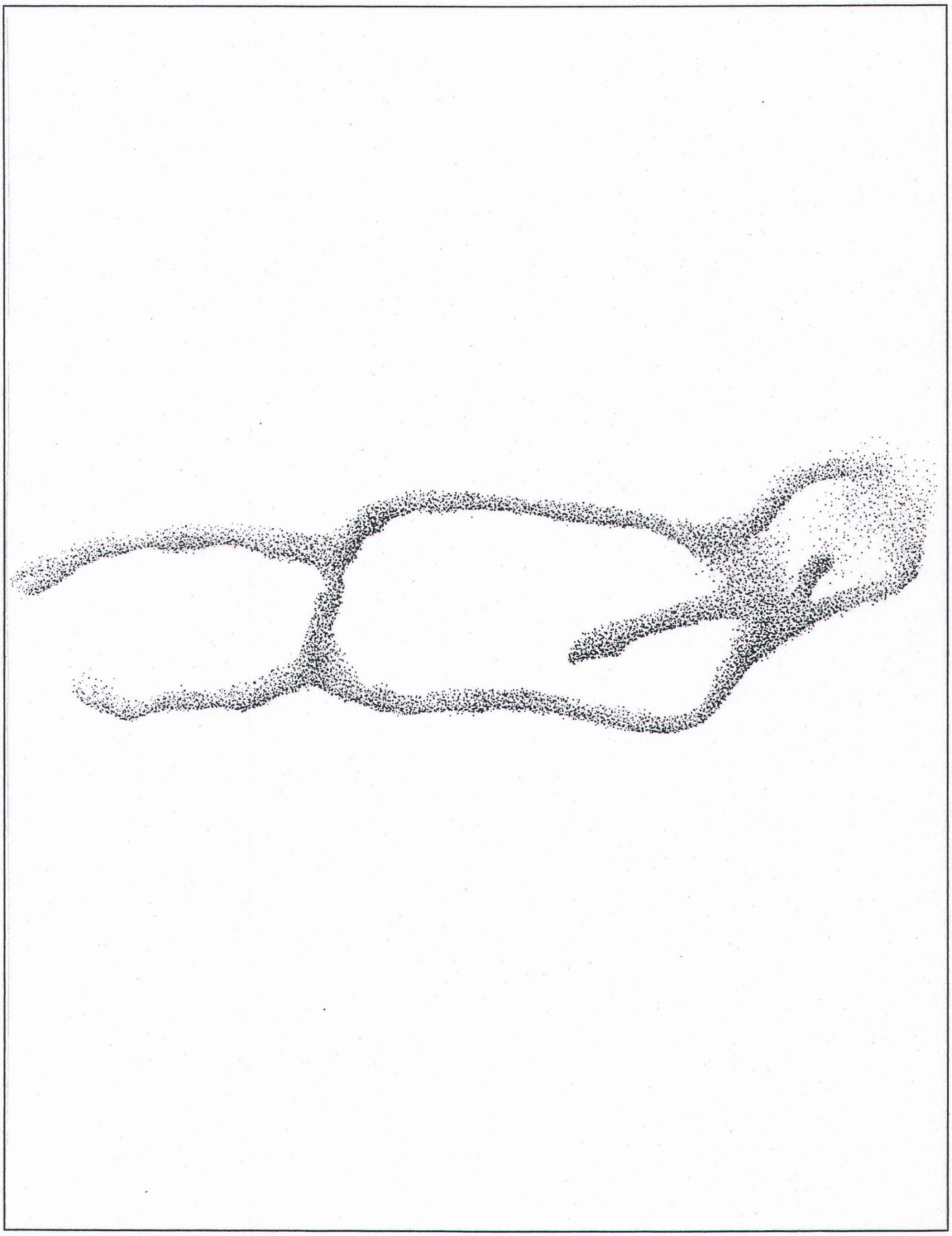
Drawing by E. Schneider.



St. Victor Petroglyphs

Figure A50 Turtle.

Drawing by E. Schneider.



St. Victor Petroglyphs

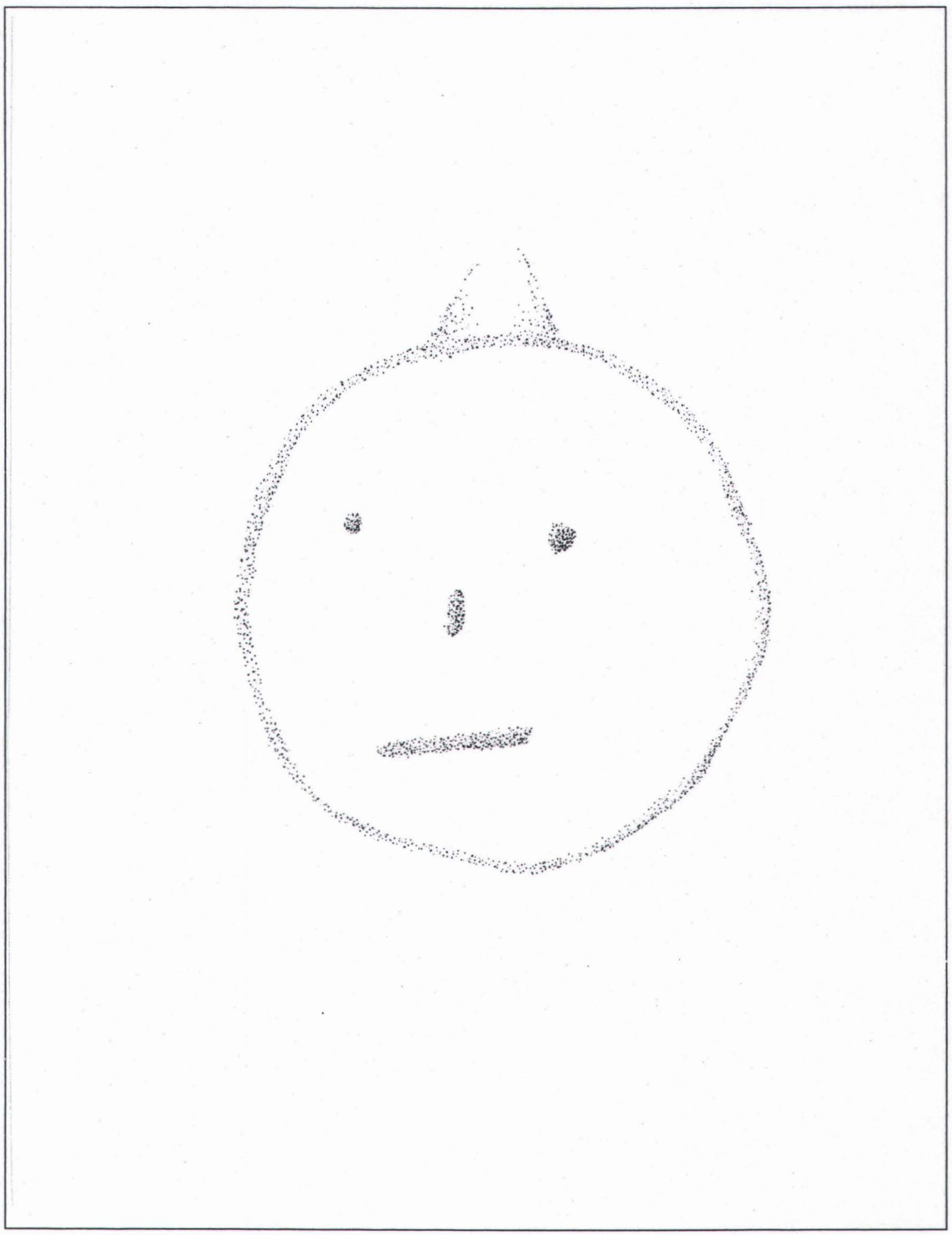
Figure A51 Zoomorph #1.

Drawing by E. Schneider.

St. Victor Petroglyphs

Figure A52 Zoomorph #2.

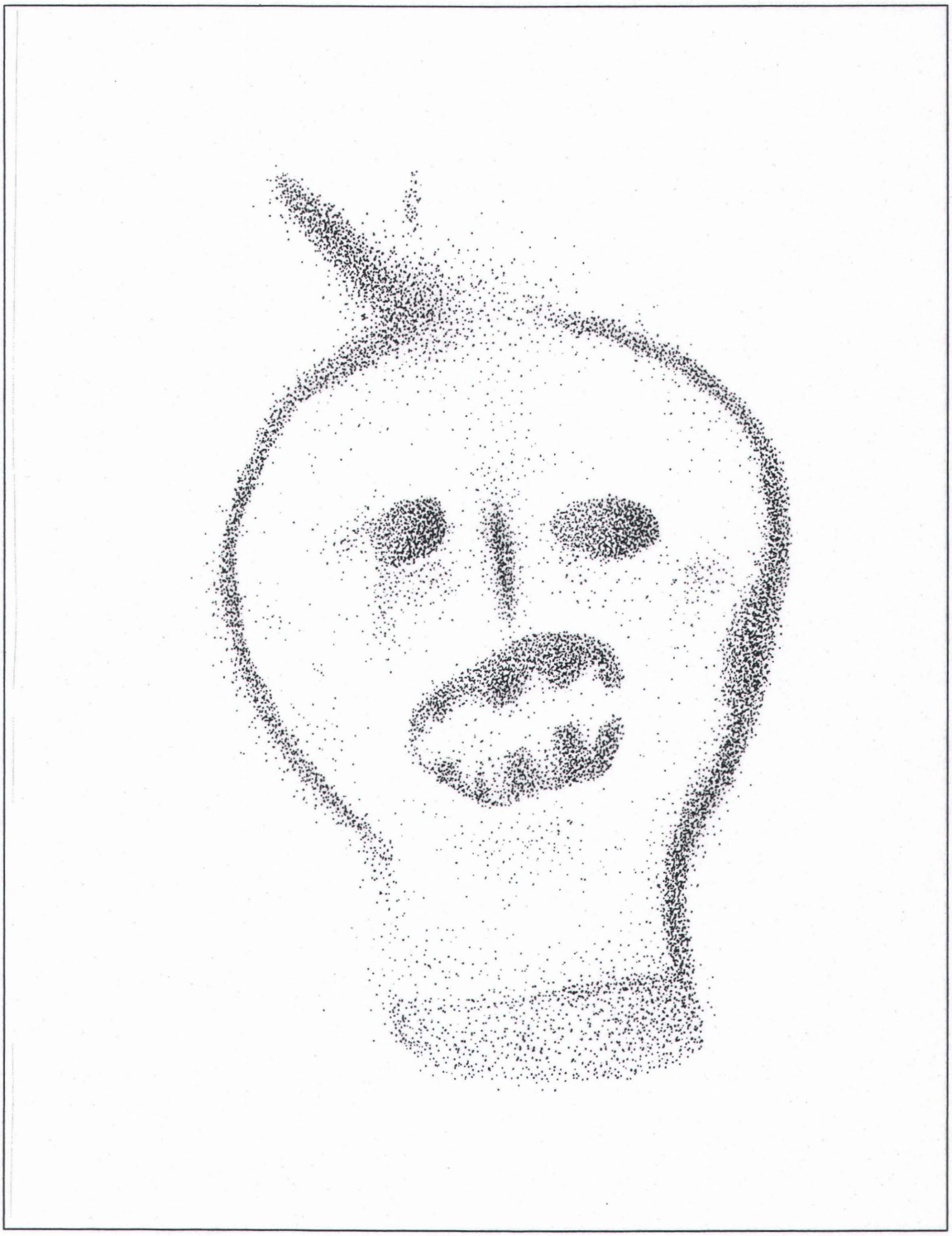
Drawing by E. Schneider.



St. Victor Petroglyphs

Figure A53 Lightly pecked human head.

Drawing by E. Schneider.

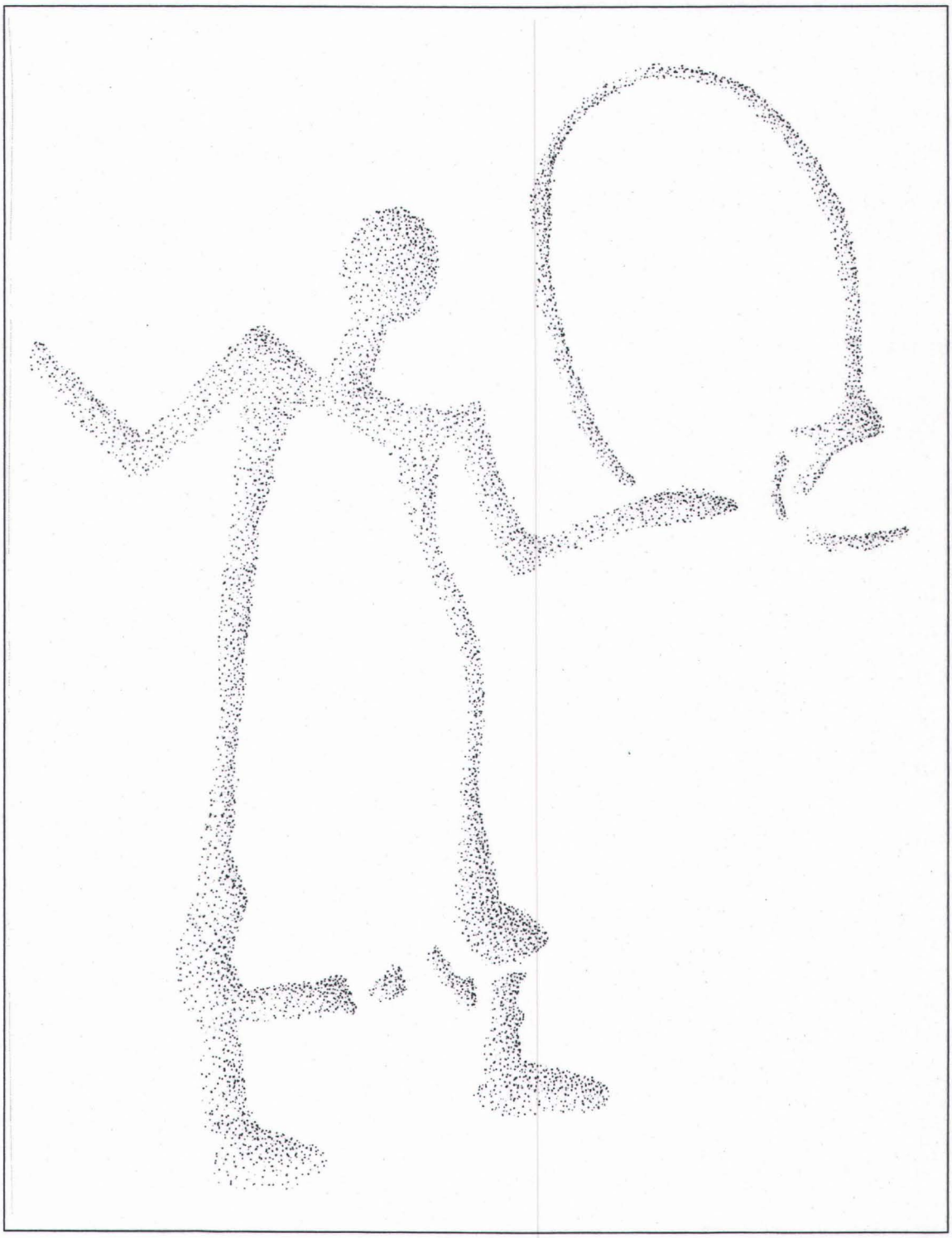


St. Victor Petroglyphs
Figure A54 Human head.
Note neck protrusion.

Drawing by E. Schneider.

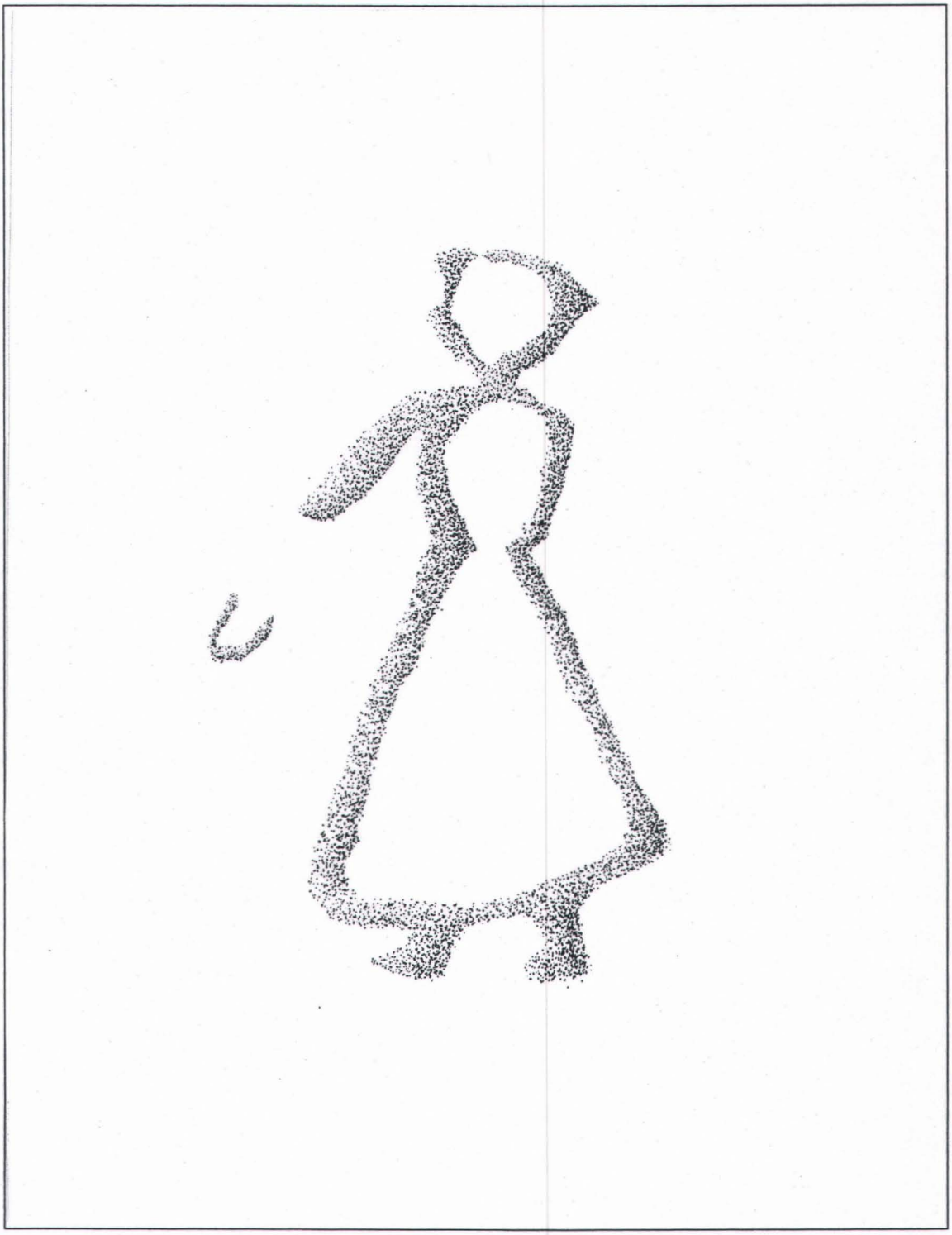
St. Victor Petroglyphs
Figure A55 Human head.
Note possible neck protrusion.

Drawing by E. Schneider.



St. Victor Petroglyphs

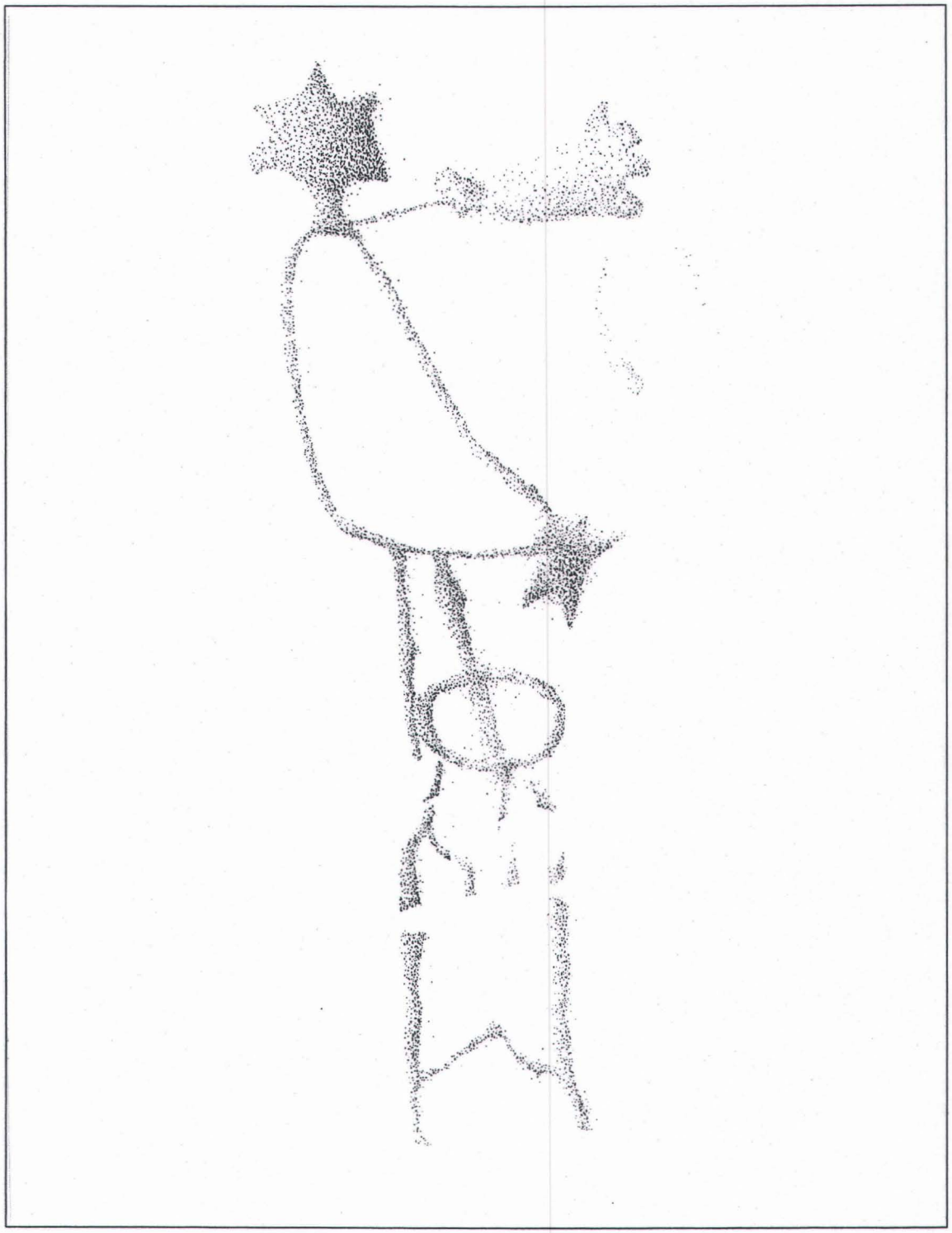
Figure A56 Anthropomorph with possible drum.
(Based on material from Amundson and Kelly 1987).
Drawing by E. Schneider.



St. Victor Petroglyphs

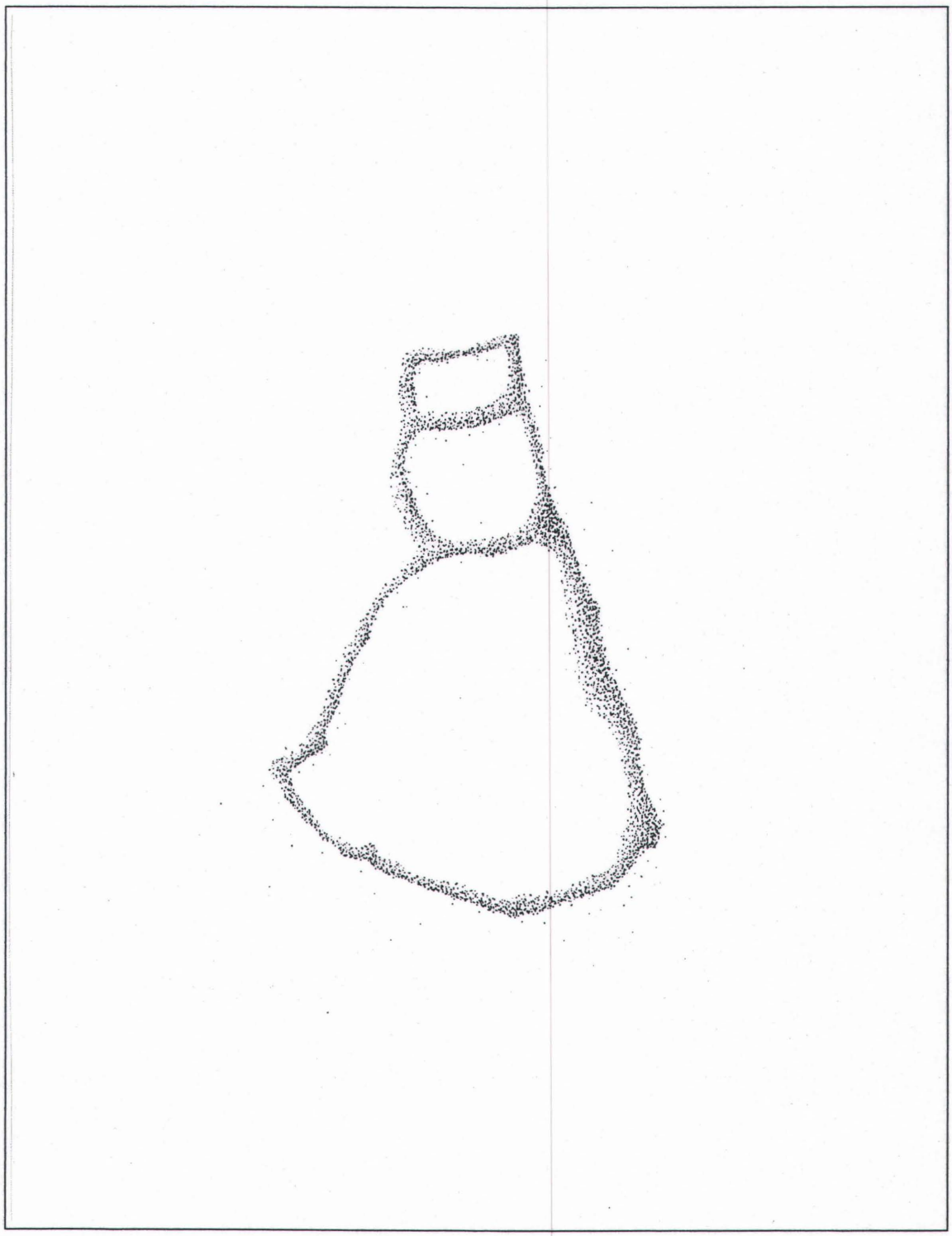
Figure A57 Anthropomorph; possibly historic in age.

Drawing by E. Schneider.



St. Victor Petroglyphs
Figure A58 Composite figure.
Note possible anthropomorph and zoomorphic figures.

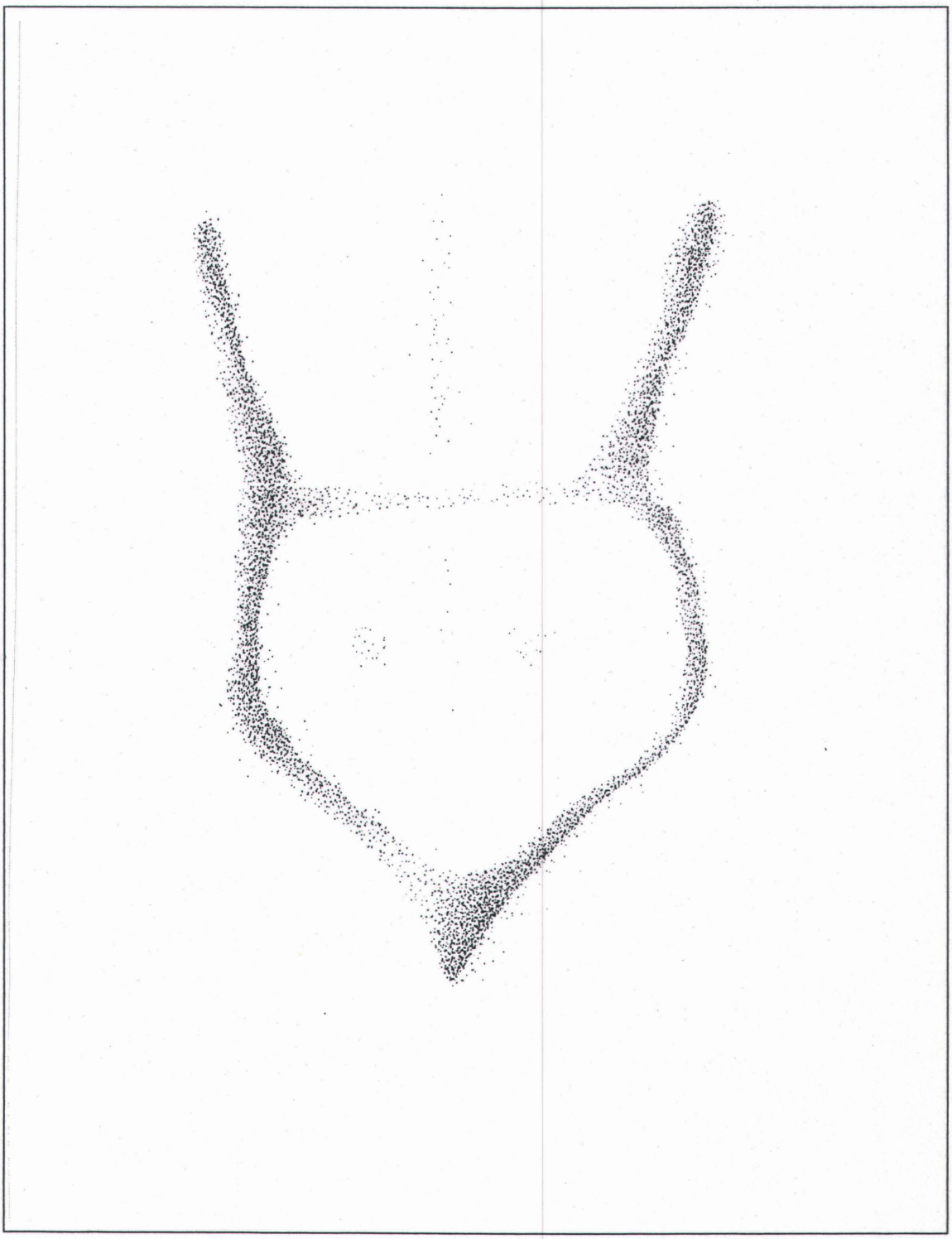
Drawing by E. Schneider.



St. Victor Petroglyphs

Figure A59 Geometric figure #1.

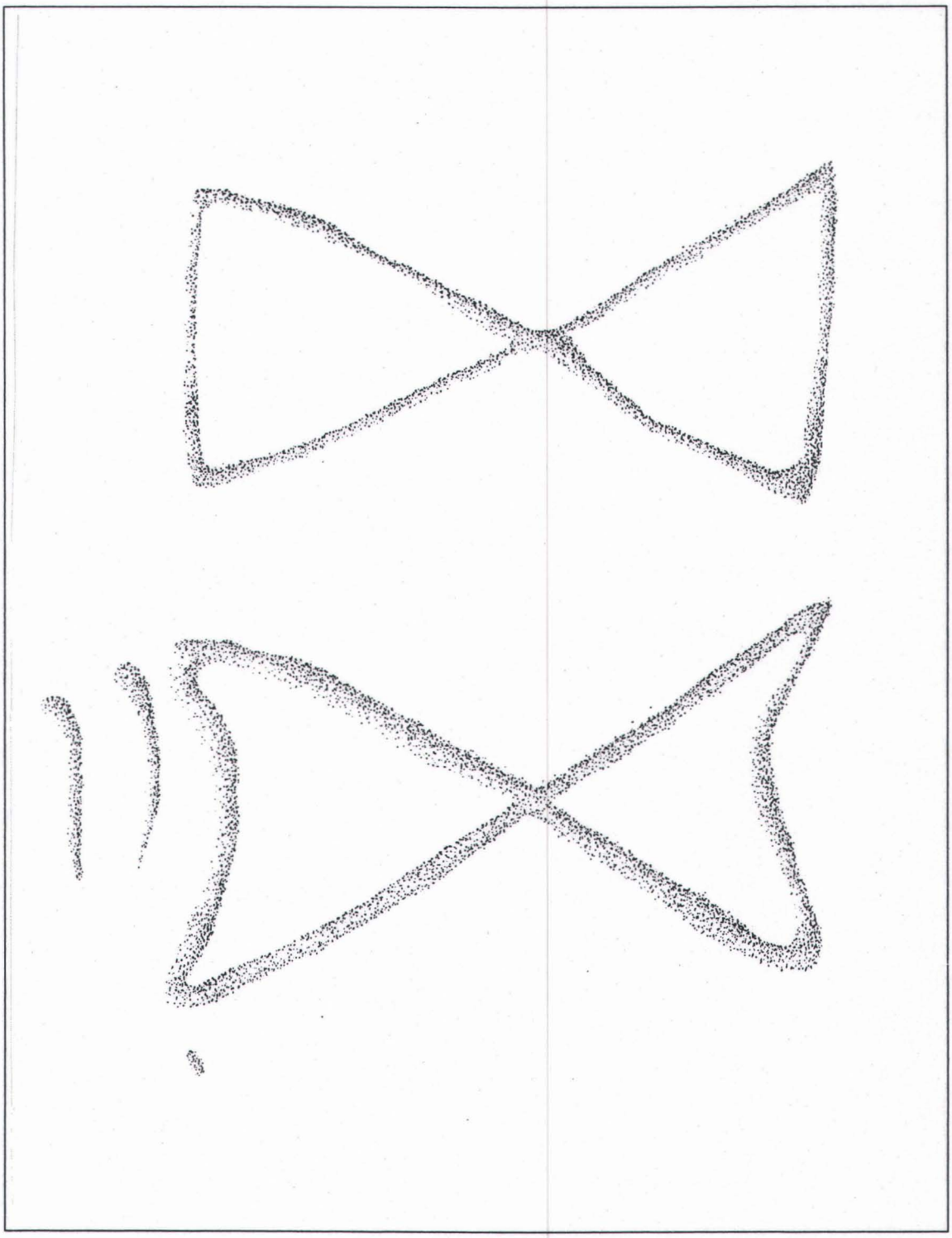
Drawing by E. Schneider.



St. Victor Petroglyphs

Figure A60 Geometric figure #2.

Drawing by E. Schneider.



St. Victor Petroglyphs

Figure A61 Geometric figures #3 and #4.

Drawing by E. Schneider.

St. Victor Petroglyphs
Figure A62 (TOP) U-shaped hoofprints.
Figure A63 (BOTTOM) Semi-circular hoofprints.

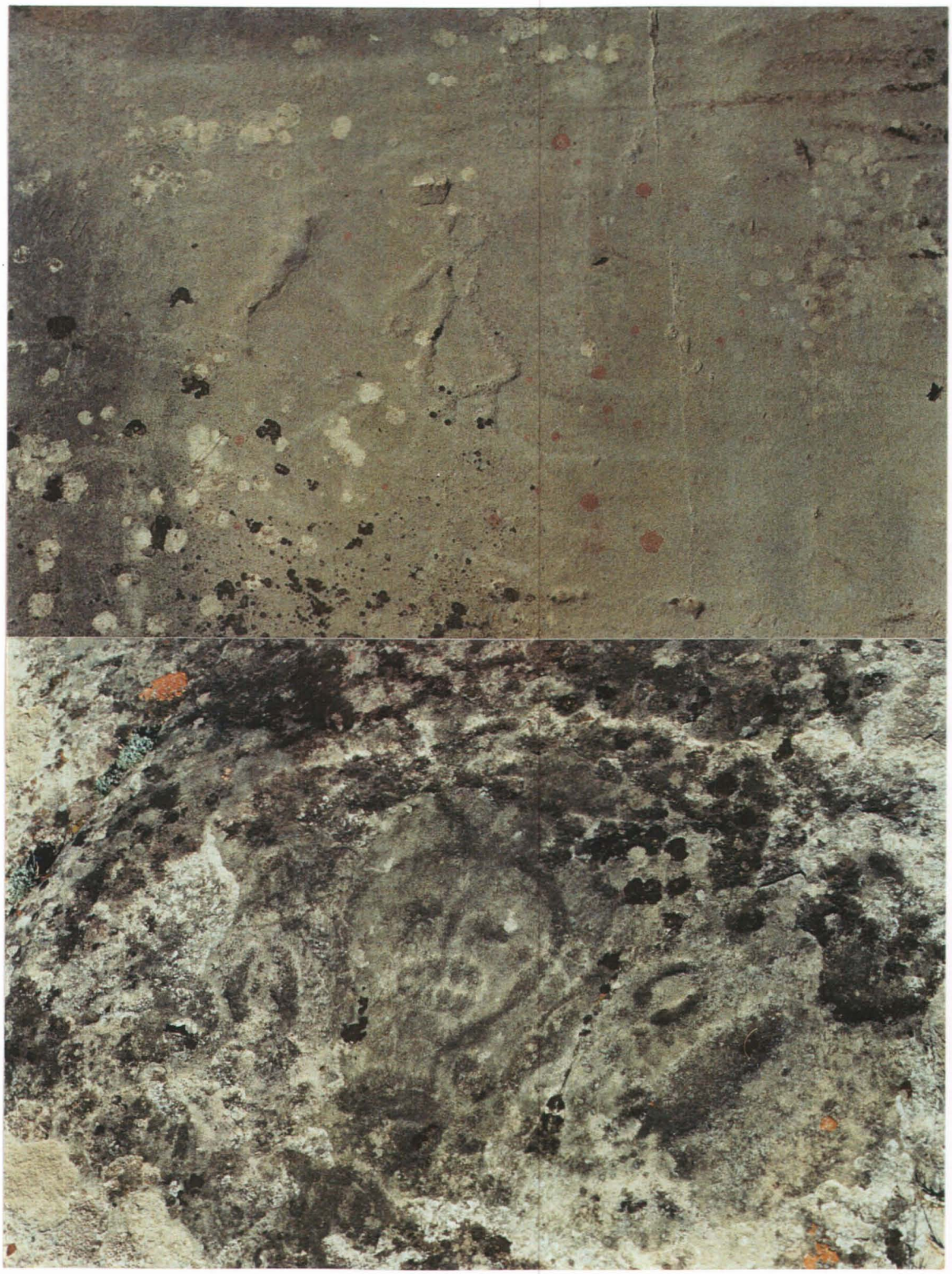
Photographs by E. Schneider.

St. Victor Petroglyphs
Figure A64 (TOP) Human handprint.
Figure A65 (BOTTOM) Human footprint.

Photographs by E. Schneider.

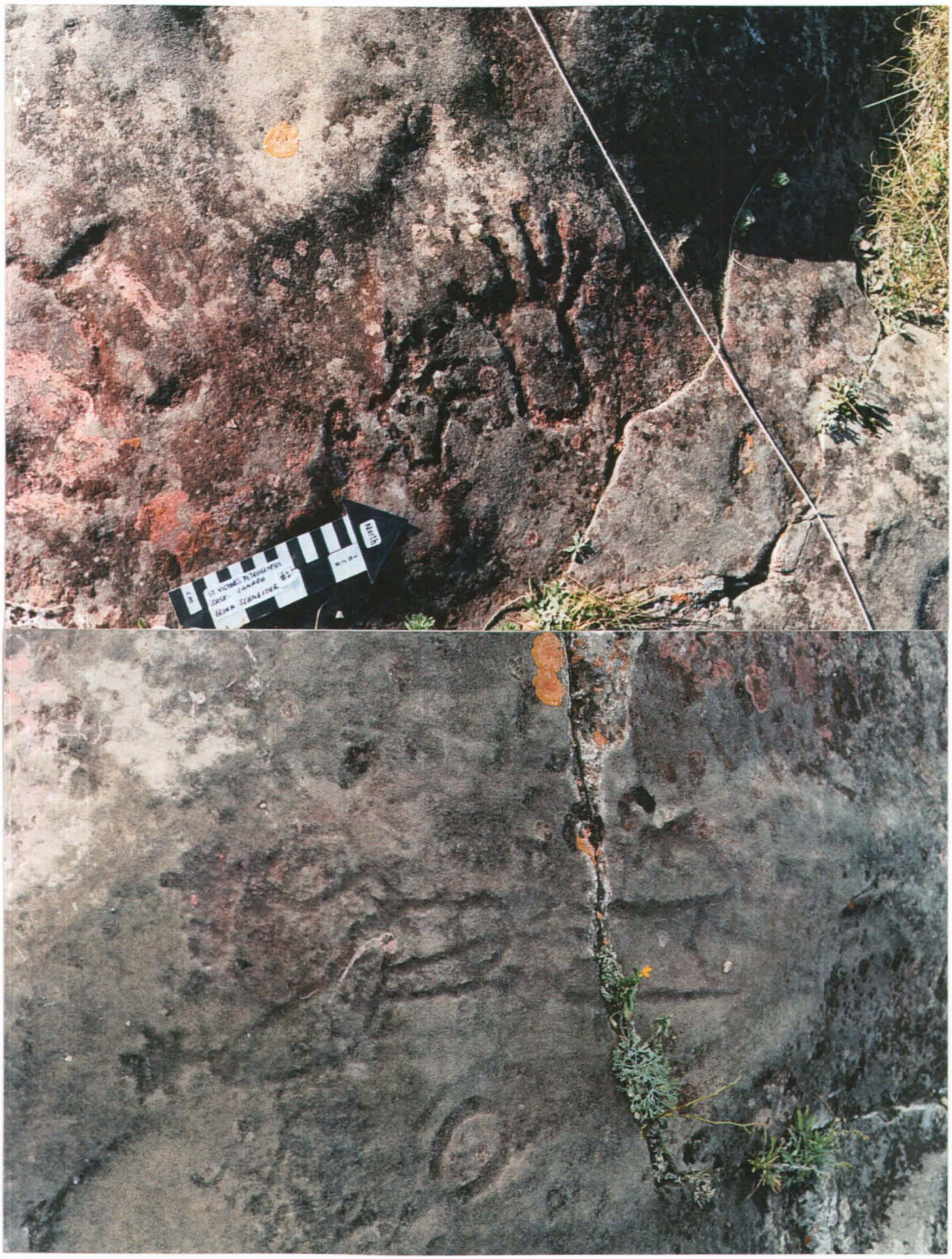
St. Victor Petroglyphs
Figure A66 (TOP) Bear/human footprints.
Figure A67 (BOTTOM) Bird track.

Photographs by E. Schneider.



St. Victor Petroglyphs
Figure A68 (TOP) Human figure, possibly historic.
Figure A69 (BOTTOM) Human head. Note teeth and neck.

Photographs by E. Schneider.



St. Victor Petroglyphs
Figure A70 (TOP) Human head and bear claw.
Figure A71 (BOTTOM) Composite figure.

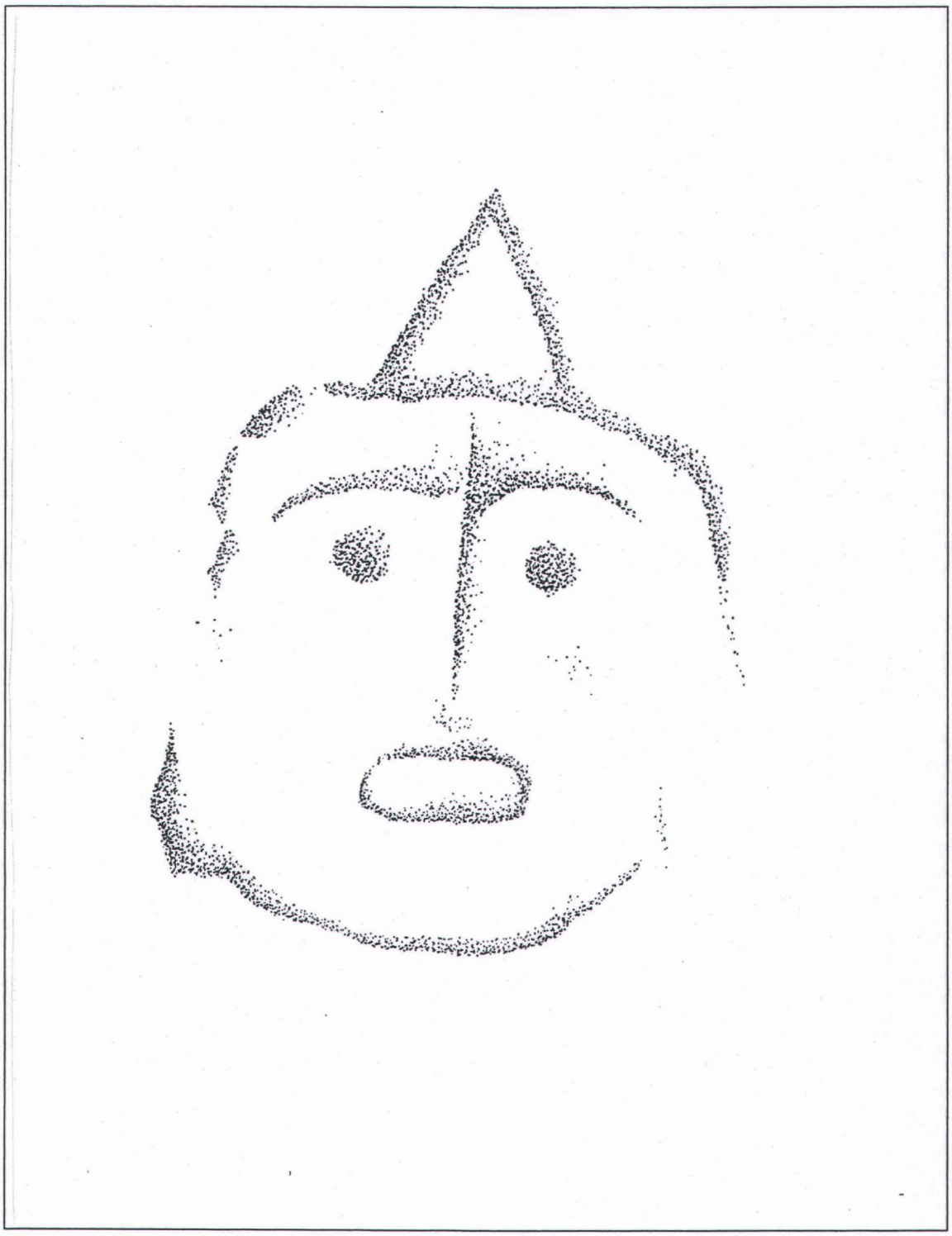
Photographs by E. Schneider.

St. Victor Petroglyphs
Figure A72 (TOP) Turtle.
Figure A73 (BOTTOM) Geometric figure #4.

Photographs by E. Schneider.

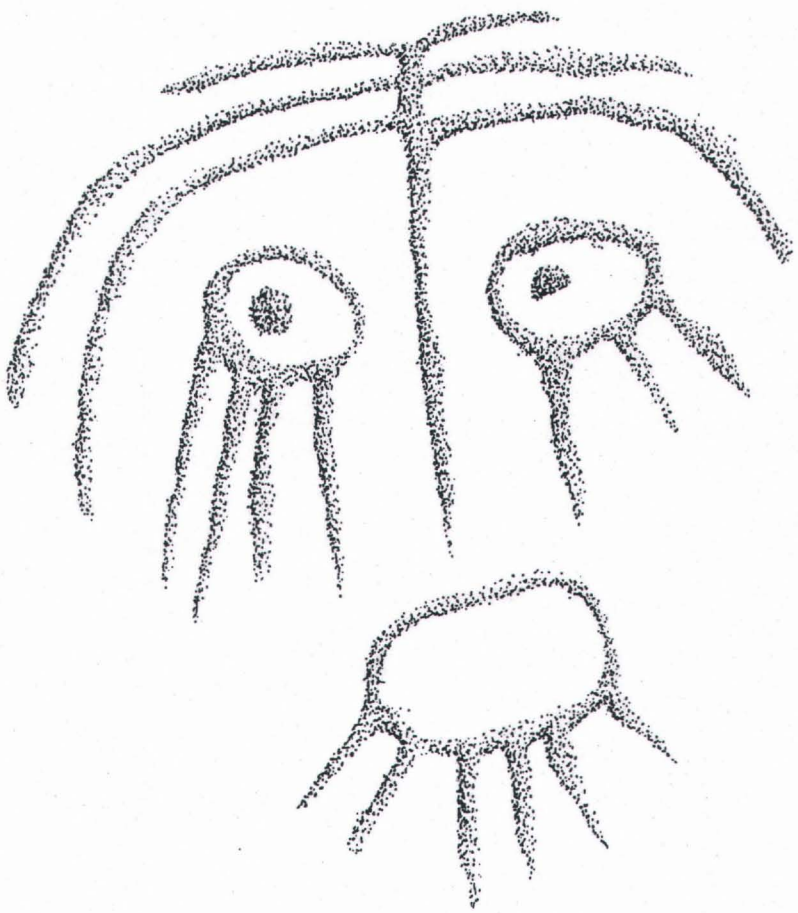
St. Victor Petroglyphs
Figure A74 (TOP) Environmental context.
Figure A75 (BOTTOM) Vandalized boardwalk.

Photographs by E. Schneider.



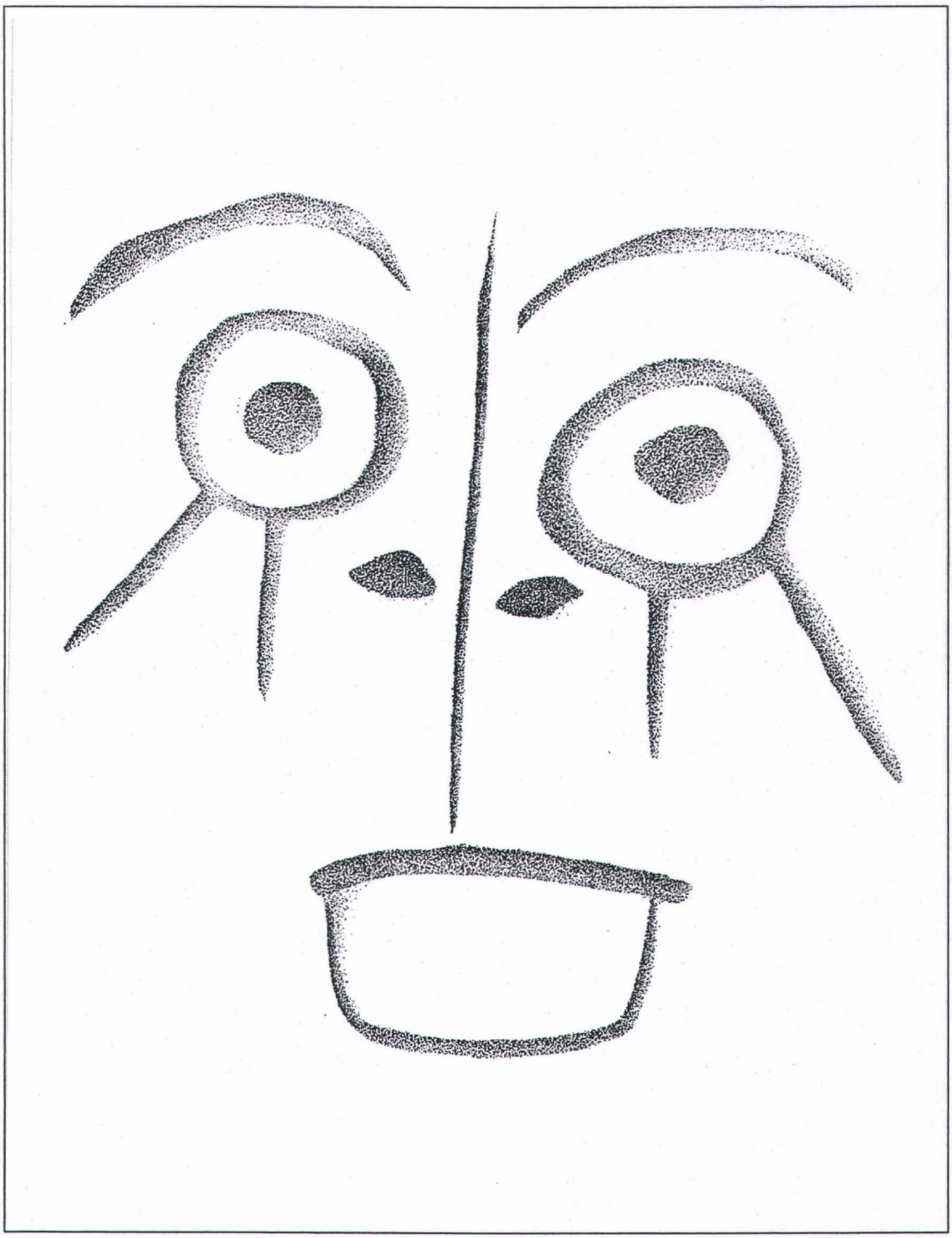
Riverhurst Petroglyph
Figure A76 Face carved on boulder.
(Based on material from Orchard 1942).

Drawing by E. Schneider.



Swanston Petroglyph (Last Mountain Lake)
Figure A77 Face carved on boulder.
(Based on material from Orchard 1942).

Drawing by E. Schneider.

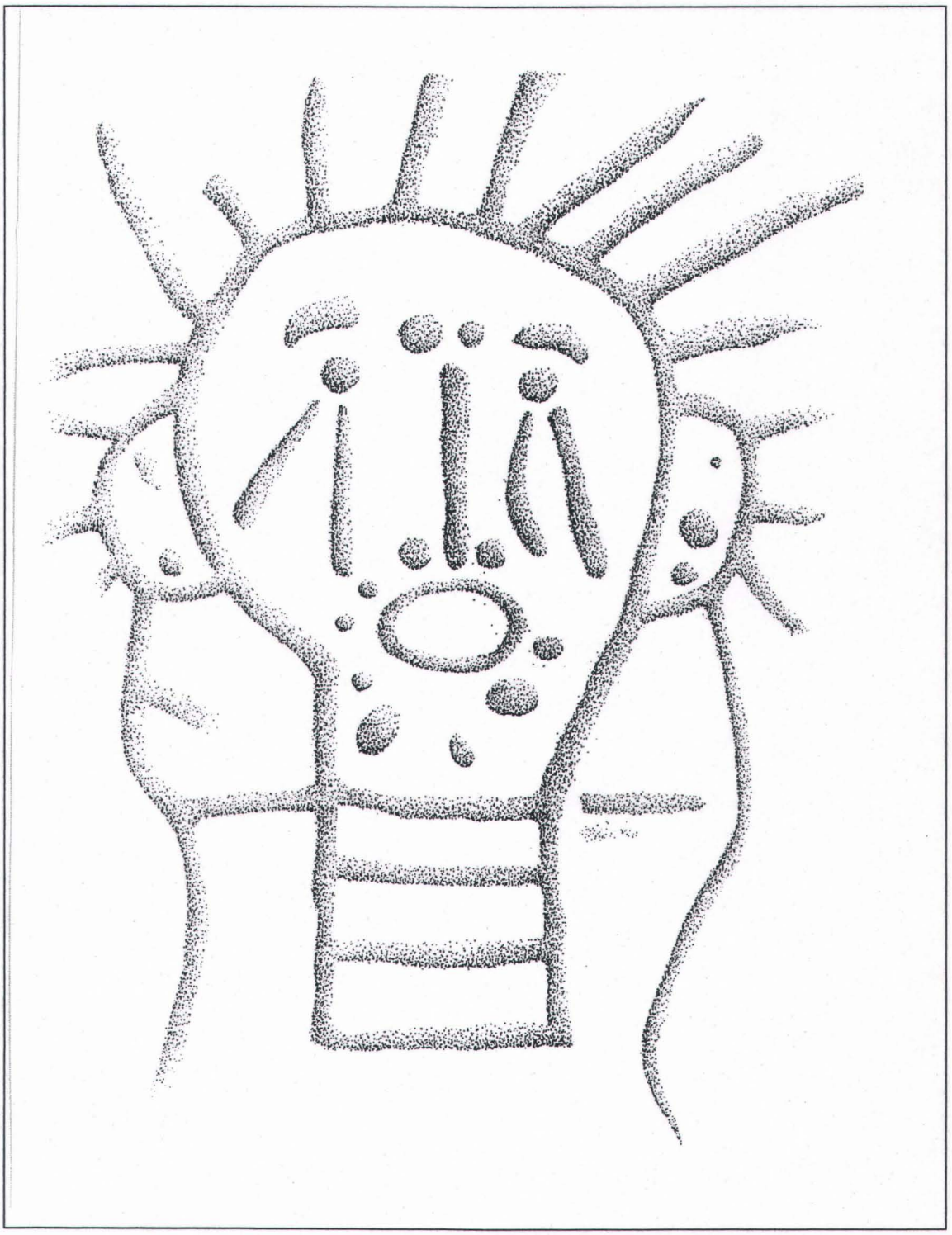


Last Mountain Lake Petroglyph
Figure A78 Face carved onto boulder.
Now located at Old George's Museum, Whitewood, Sk.

Drawing by E. Schneider.

Last Mountain Lake Petroglyph
Figure A79 (TOP) Petroglyph in display case along with other artifacts.
Figure A80 (BOTTOM) Close up of petroglyph.

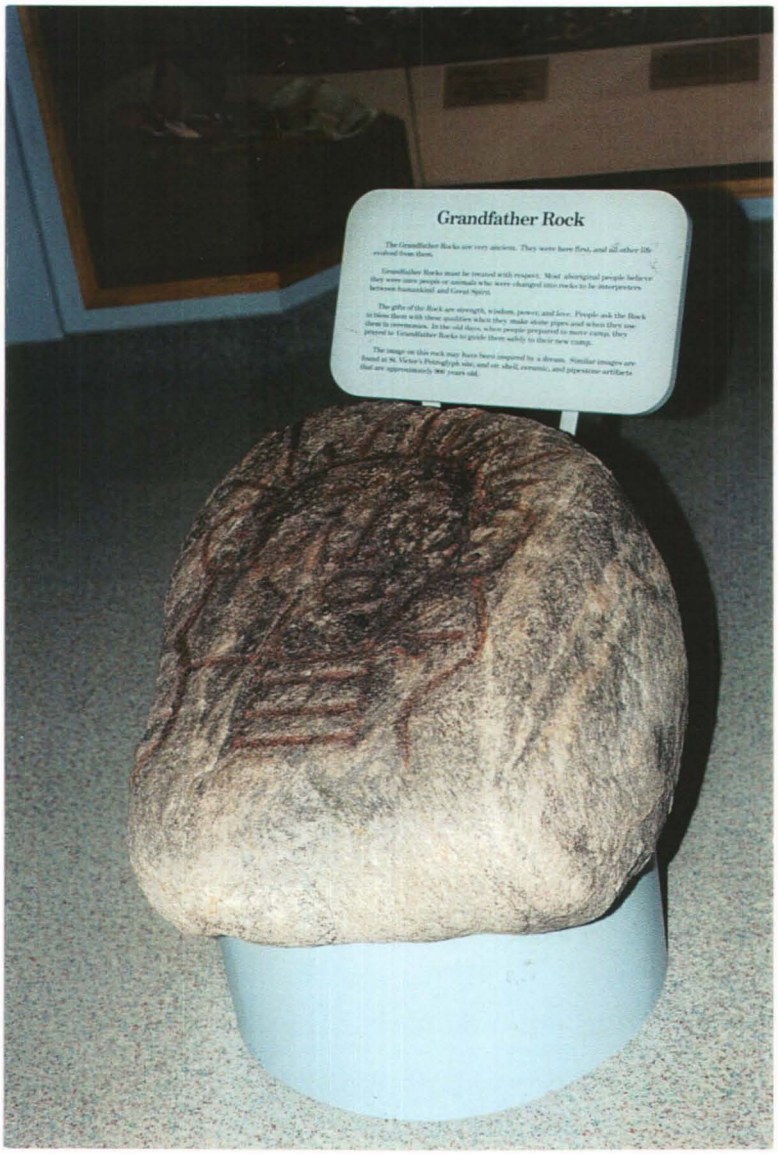
Photographs by E. Schneider.



Weyburn Petroglyph

Figure A81 Face carved into boulder.

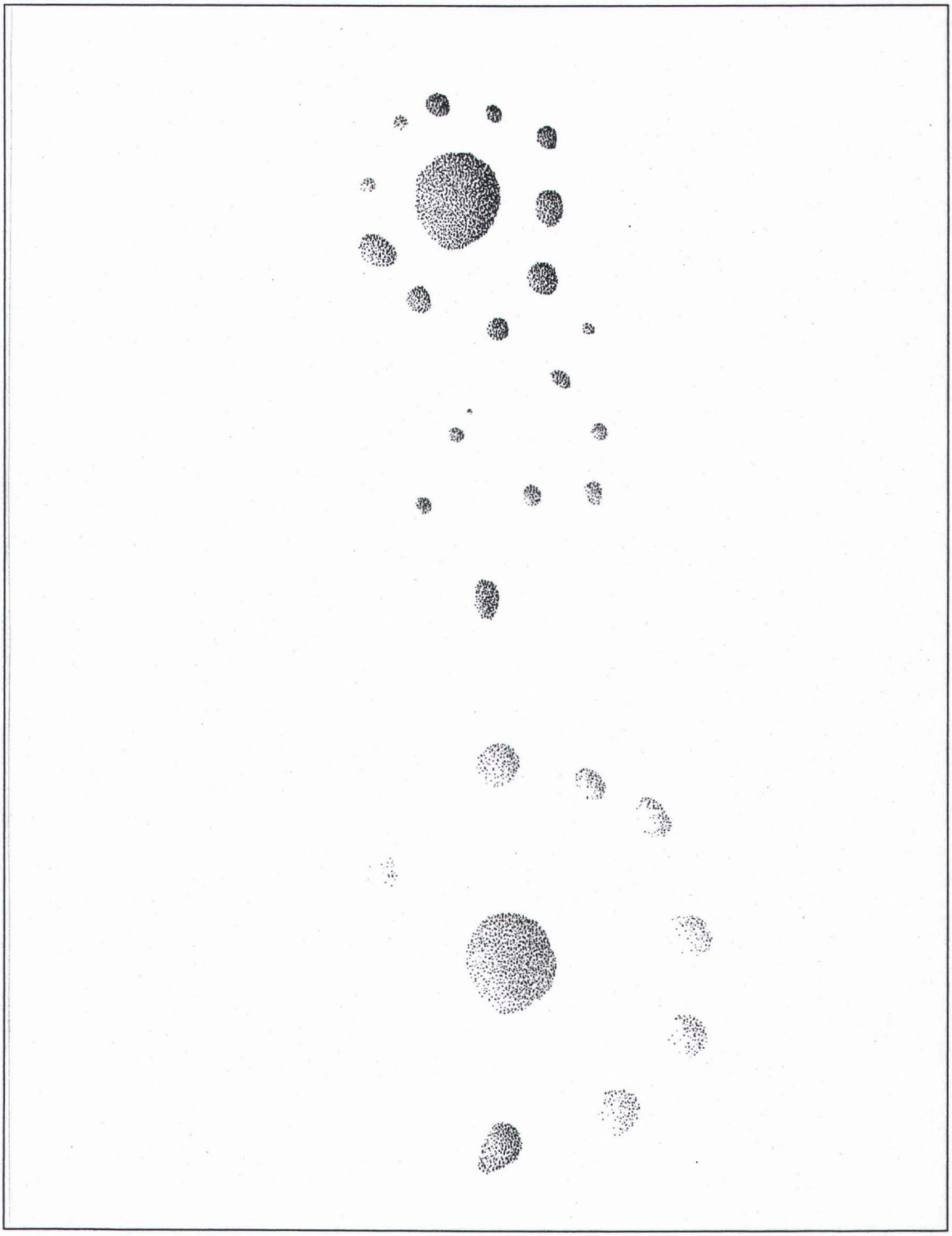
Drawing by E. Schneider.



Weyburn Petroglyph

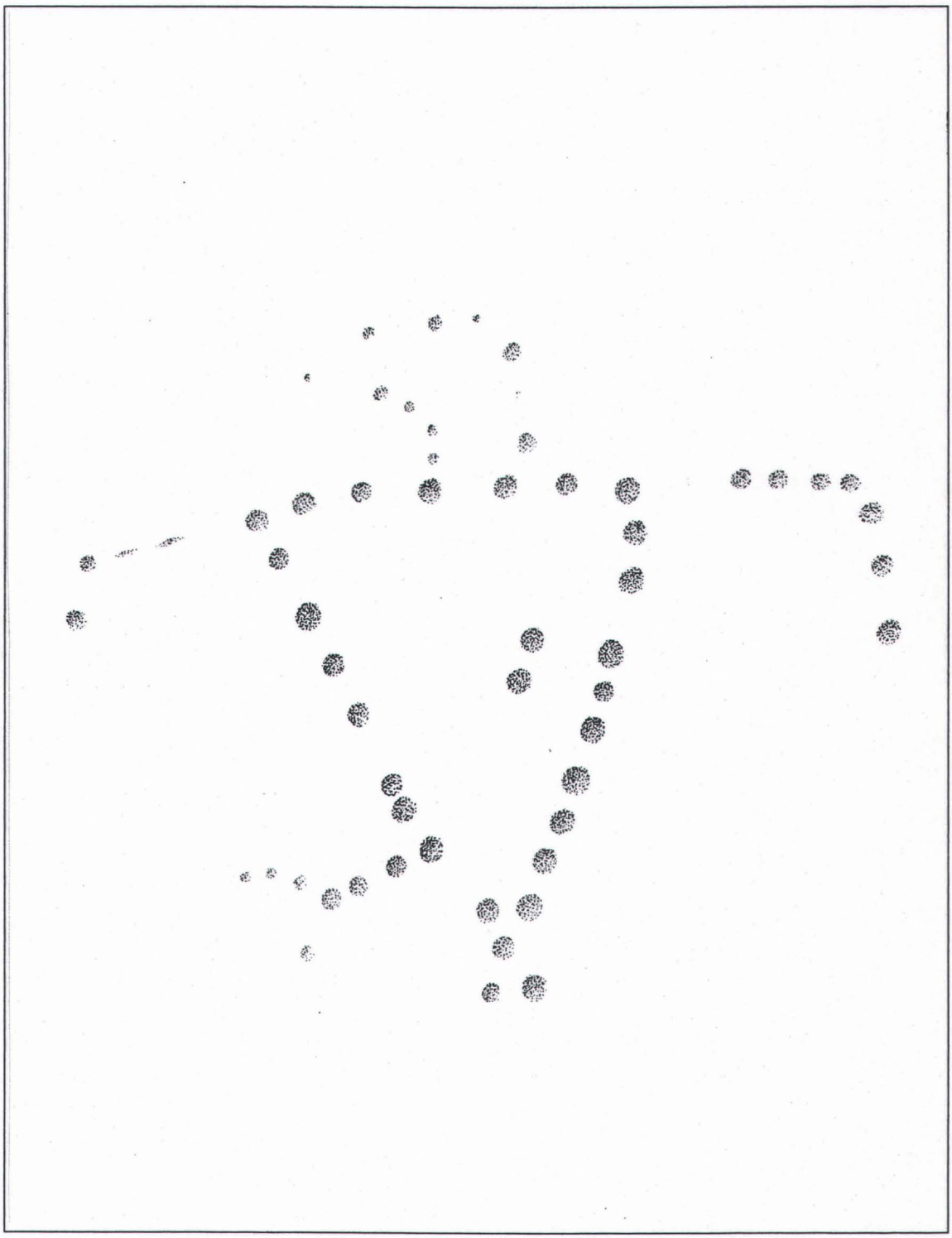
Figure A82 Boulder in Royal Saskatchewan Museum of Natural History exhibit.

Photograph by E. Schneider.



Roch Percée Petroglyphs
Figure A83 Circle formations.
Note unusual style utilizing drilled holes to incise design.

Drawing by E. Schneider.



Roche Percée Petroglyphs
Figure A84 Thunderbird motif.
Note drilled hole technique.

Drawing by E. Schneider.

Roche Percée Petroglyphs
Figure A85 (TOP) Rock face.
Figure A86 (BOTTOM) Drilled hole rock art.
Note circles and thunderbird motif at bottom right.
Photographs by E. Schneider.

Roche Percée Petroglyphs
Figure A87 (TOP) Rock formation.
Figure A88 (BOTTOM) Environmental context.

Photographs by E. Schneider.